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## ENDEMIC GOITER AND INTELLIGENCE

By ROBERT OLESEN, Surgeon, United States Public Health Service, and MABEL R. FERNALD, Ph. D.,  
Director, Psychological Laboratory of the Vocation Bureau, Cincinnati Public Schools

### INTRODUCTION

As additional thyroid surveys have been made and unexpected distributions of endemic goiter have been discovered, interest in the prevention and cure of this malady has steadily increased. A portion of this interest has been directed to the determination of the effects of endemic goiter. Quite naturally there has been considerable surmise, as well as some earnest study, concerning the effects of this condition upon mentality. As a result of this consideration of the subject there is now a fairly wide impression that simple goiter produces mental subnormality and retardation.

If it is true that goiter exerts a definitely detrimental effect upon mentality, the prevention of this condition assumes an even greater importance than has heretofore been ascribed to it. Conversely, if this observation is erroneous, the need for intensive goiter prophylaxis is somewhat lessened. Under the circumstances it appears desirable to determine as accurately as possible just what are the detrimental effects of endemic goiter. If investigations to determine these effects are pursued with reasonable zeal and thoroughness, it will undoubtedly be possible to sidetrack mere assumption, thereby permitting concentration upon more important phases of the general problem.

The present study touches but one phase of the goiter problem—the effect of endemic goiter upon the intelligence of school children. The findings, being based upon a limited number of pupils in a single community, at one level of school advancement, can scarcely be accepted as positively indicative of conditions in all sections of the country. Before hard and fast conclusions concerning this interesting subject can be drawn, it is manifestly desirable that similar investigations be undertaken in other parts of the country on a more extensive scale and possibly with different methods. Moreover, such studies might well be conducted in regions of considerable goiter endemicity.

### 1. NATURE OF THE PRESENT INVESTIGATION

*Source of the material.*—The data for the study were obtained through two independent investigations, one of which was the thyroid survey made in Cincinnati by the Public Health Service in

1923-24. The methods employed in examining and the standards used in classifying the thyroid enlargements were presented in detail in a special publication.<sup>1</sup>

While the thyroid survey was being made, group intelligence tests were being applied independently to the children in the sixth grade throughout the city. These tests were made by the staff of the Psychological Laboratory of the Vocation Bureau in the Cincinnati public schools. For several years the Vocation Bureau has given group intelligence tests to approximately the entire group of sixth-grade pupils. Various tests have been used for this purpose, but in the present instance the Otis advanced examination was utilized.

*Scope of the study.*—The present study is concerned primarily with the determination of whether any relationship exists between the size of the thyroid and what has been variously designated as intelligence, brightness, or mental alertness. It does not touch upon the relationship of such mental conditions as nervousness, emotional disturbance, psychopathic trends, or disturbances of personality. Two indices of intelligence have been utilized: First, school retardation or advancement as indicated by the ages of the children in a given school grade; and second, the record made in a standard group test designed to measure intelligence or brightness.

*Significance of chronological age data.*—Since the children observed were all in the same grade, the sixth, their ages are indicative of their degree of retardation or advancement in school. The younger children are the more advanced educationally, while the older are the more retarded. Furthermore, there is much evidence that the younger children in any given grade are, in general, brighter than the older children in the same grade. While level of school advancement, considered alone, is far from being a reliable diagnostic measure of brightness, it is now well established that dullness is the most important single factor in producing school retardation. Within any given grade it has been found repeatedly that the younger children make, on the average, the better records in intelligence tests. Furthermore, the actual level of their educational attainments tends to be higher than that of the older children. As a rough basis of comparison, therefore, the ages of the children in the present study give a clue to their brightness or dullness. While less exact and reliable than the findings of the intelligence tests, the chronological age data are important as supplementary and confirmatory evidence.

Special caution must be observed, however, in interpreting comparisons involving age differences with such a group as the one under consideration, which consists of children of a single school grade. Since the age groups have not been obtained by random sampling,

<sup>1</sup> Olesen, Robert: Thyroid Survey of 47,493 Elementary-school Children in Cincinnati. Pub. Health Rep., vol. 39, No. 30, pp. 1777-1802 (July 25, 1924.) Reprint No. 941.

but through a process of school selection largely influenced by brightness, age differences signify both differences in brightness and differences due to age alone. If both brightness and age are factors of importance in relation to thyroid enlargement, the fact that age as used in the present study involves both factors would make the interpretation of findings based on age especially difficult. If the children of the study represented not one cross section of the school population but several such cross sections, it would be more feasible to isolate the factors due to differences in brightness and age as in dependent variables. Under the conditions of the present study one factor may operate either to exaggerate the influence of the other or to obscure it.

*Significance of intelligence tests.*—In view of the extensive literature now available, both descriptive and controversial, regarding intelligence tests, it is unnecessary to discuss this source of evidence. Those interested in the significance and development of mental testing are referred to studies bearing on one or another aspect of this subject, prepared by Terman,<sup>2</sup> Pintner,<sup>3</sup> Yoakum and Yerkes,<sup>4</sup> and Dolan,<sup>5</sup> as well as to the comprehensive bibliographical references which these studies contain. The authors of the present article believe that the data supplied by carefully constructed and standardized tests are the best means now available for gauging the comparative intellectual endowment of various groups.

Group intelligence tests, or those designed for application to individuals in groups rather than singly, appear to be less reliable for purposes of individual diagnosis than individual tests of the Binet-Simon type, although the correlations between the two types of tests are high. Since the application to men in the Army of group intelligence tests, their serviceability for securing rapid, extensive, and objective indices of mental capacity has been increasingly recognized. Their advantage over any form of individual examination lies in the saving of time. This advantage serves to compensate for the somewhat greater chance for error in certain individual performances in group tests as compared with individual examinations.

*The Otis test.*—The Otis advanced examination, which was used in the present study, has proved to be a satisfactory means of measuring children at this level of school advancement. It was prepared and standardized by Dr. Arthur S. Otis, a recognized authority in this field of measurement. The examination consists of 10 separate tests, printed in the form of an examination booklet. The tests are administered consecutively with rigidly enforced time limits. In

<sup>2</sup> Terman, L. M.: *The Measurement of Intelligence*. Houghton, Mifflin Co., Boston.

<sup>3</sup> Pintner, Rudolf: *Intelligence Testing*. Henry Holt & Co., New York.

<sup>4</sup> Yoakum, C. S., and Yerkes, R. M.: *Army Mental Tests*. Henry Holt & Co., New York.

<sup>5</sup> Dolan, Helen H.: *Developments in the Field of Mental Testing*. Pub. Health Rep., vol. 33, No. 40 (Oct. 3, 1924). Reprint No. 961.

giving the examination to the sixth-grade school children in Cincinnati, Otis's instructions were followed exactly. For the details of this procedure the reader is referred to the manual of directions prepared by the author.<sup>4</sup>

*Expression of results.*—The results of an examination of this type may be expressed in several different ways. The most direct result is the total score, which is obtained by adding together the scores of the 10 separate tests. The total score, however, must be interpreted through comparison with norms established for the given test before it gives a rightful indication of the child's level of intelligence or his degree of brightness.

The percentile rank is the measure of brightness which has been employed in the present study. Norms are presented by Otis, which show the records made by standard groups of children of given ages. To determine the percentile rank of a given child, his performance is compared with that of the standard group of children of the same age in such a way that his position in this group is found. A given percentile rank tells directly what the child's standing is in relation to the group for which the norms have been established. Thus a percentile rank of 10 indicates that an individual exceeds 10 per cent of the standard group, and is surpassed by 90 per cent of this group. Children who are average or normal in intelligence as compared with other children of their own ages have percentile ranks around 50. Ranks above 50 indicate some degree of superiority as compared with the standard group, and ranks below 50 express some degree of inferiority.

It is important to bear in mind that the age norms with which the sixth-grade children of this study have been compared do not represent the attainments of children of the various ages in the sixth grade, but rather the standings of children of the given age, assembled in correct proportions from grades above and below as well as for that grade. Since, as has been pointed out, the younger children in any given grade are, on the whole, the brighter, it may be expected that the younger children in the sixth grade will show a preponderance of percentile ranks above 50 and that the older children will show the reverse tendency, namely, a preponderance of percentile ranks below 50. Furthermore, the farther the group departs from the average for the grade, the farther does the average percentile rank of this group deviate from 50.

## 2. RESULTS

In the following section the results of the study are set forth by means of tables, charts, statistical constants, and explanation of the data.

<sup>4</sup> Otis Group Intelligence Scale, Manual of Directions; 1921 revision. World Book Co.



In the presentation of the available data, certain material descriptive of the group under consideration will first be offered. Thereafter the data will be analyzed to determine the possible relationship between thyroid enlargement and mentality.

*Number, sex, and color of children.*—At the time when the thyroid examinations were made and the mental tests applied, all of the children were in the sixth grade, having completed seven or eight months of the school year. Of the total number of 3,796 children examined, 1,728 were white boys and 1,630 were white girls, while 174 were colored boys and 264 were colored girls. Owing to the small number of colored children included in the survey it is not possible to do more than indicate the general trend of relationship between their thyroid findings and the data bearing upon intelligence. Among the white children, however, it is possible to make more detailed comparisons according to the ages of the children.

*Age distribution.*—The ages of the children included in the investigation, as well as the percentage of children at each age period, are set forth in Table 1, and graphically in Chart 1. The ages may be considered as taken April 1, since the examinations were made within a range of less than a month before or after that date. The age given is that of the nearest birthday. Accordingly, the age of 10 means that the age of the child was between  $9\frac{1}{2}$  and  $10\frac{1}{2}$  years and similar meaning is intended for other ages.

TABLE 1.—Age, sex, and color of 3,796 children included in the goiter-intelligence study, from the sixth grade of the Cincinnati public schools, according to numbers and percentages

Age	White				Colored			
	Boys		Girls		Boys		Girls	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
9.....			2	0.1				
10.....	6	0.4	12	0.7			2	0.7
11.....	147	8.5	183	11.2	4	2.3	10	3.8
12.....	628	36.3	699	42.8	17	9.8	42	15.9
13.....	444	25.7	427	26.4	29	16.6	64	24.2
14.....	271	15.7	188	11.5	54	31.1	50	22.4
15.....	180	10.4	92	5.6	45	25.8	55	20.9
16.....	47	2.7	24	1.5	21	12.1	22	8.3
17.....	5	0.3	3	0.2	4	2.3	10	3.8
Total.....	1,728	100.0	1,630	100.0	174	100.0	264	100.0

The median ages of the various groups are of interest as indicating the central tendencies. These medians are as follows:

Group	Median ages
	Years
White boys.....	12.7
White girls.....	12.4
Colored boys.....	14.2
Colored girls.....	13.7
Entire sixth-grade group.....	12.7

*Thyroid findings.*—In Table 2 are shown the number and percentage of each degree of thyroid enlargement among the 1,728 white boys and 1,630 white girls included in the survey. From this study it will be seen that 436, or 25.2 per cent, of the thyroids of the boys were enlarged to some discernible extent. Among the girls there were 642 thyroid enlargements, a percentage of 39.4. Owing to the comparatively small number of colored children included in the survey no separate tabulations have been made for them. However,

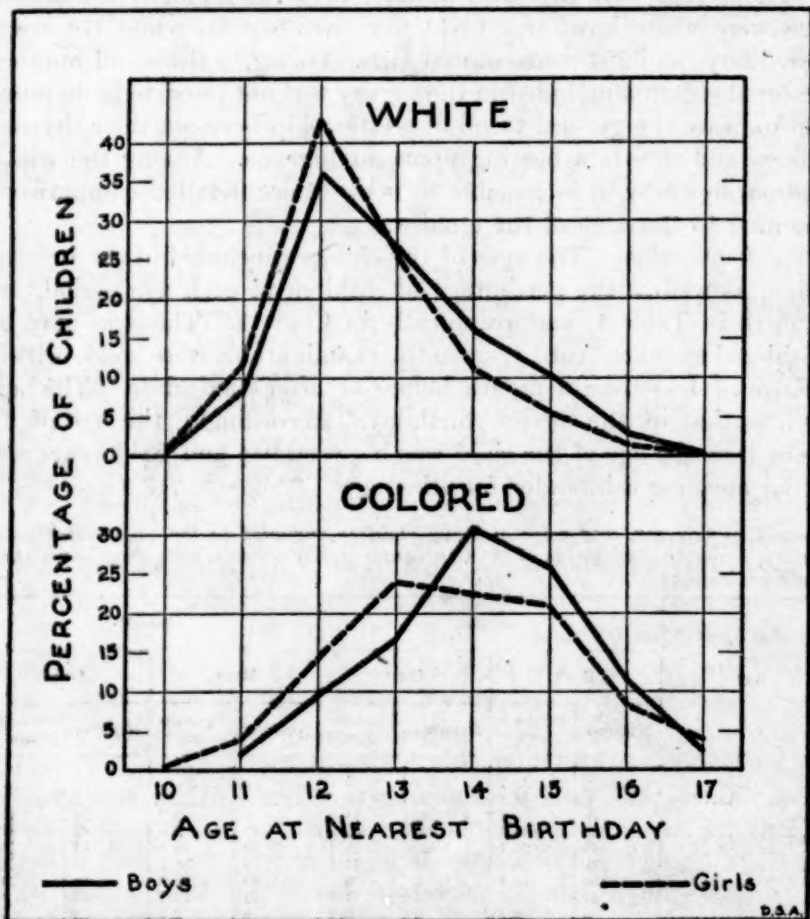


CHART 1.—Percentage distribution of 3,706 children—1,728 white boys and 1,728 white girls and 1,630 white girls and 264 colored girls—in the sixth grade of the Cincinnati public schools, according to age, sex, and color.

among the colored boys there were 42, or 24.1 per cent, with enlarged thyroids, and 137, or 51.9 per cent, with enlarged thyroids among the colored girls, the last figure exceeding the percentage prevalence among the white girls.

A further point of interest in Table 2 is the decline in the amount of thyroid enlargement among the white boys after the age of 11 years. Among the white girls, on the other hand, there is a steady increase in thyroid enlargement after the same age.

TABLE 2.—*Number and percentage of each degree of thyroid enlargement among 1,728 white boys and 1,630 white girls in the sixth grade of the Cincinnati public schools.*<sup>1</sup>

Thyroid status	All ages		Age 11		Age 12		Age 13		Age 14		Age 15	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Total.....	1,728	1,630	147	183	628	699	444	427	271	188	180	92
Normal.....	1,292	988	104	123	460	423	323	252	201	115	148	60
Enlarged.....	436	642	43	60	169	276	121	175	70	73	32	42
Slight.....	378	486	39	43	159	217	106	140	58	50	26	27
Moderate.....	42	103	4	12	16	40	10	22	7	14	4	12
Marked.....	16	53	—	5	4	19	5	13	5	9	2	3

PERCENTAGE OF CHILDREN												
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Normal.....	74.8	60.4	70.8	67.2	74.7	60.5	72.8	59.0	74.2	61.2	82.2	64.4
Enlarged.....	25.2	39.4	29.2	32.8	25.3	39.5	27.3	41.0	25.8	38.8	17.8	45.6
Slight.....	21.9	29.8	26.5	23.5	22.1	31.1	23.9	32.8	21.4	26.6	14.5	29.3
Moderate.....	2.4	6.3	2.7	6.6	2.6	5.7	2.2	5.1	2.6	7.4	2.2	13.0
Marked.....	.9	3.3	—	2.7	.6	2.7	1.1	3.0	1.8	4.8	1.1	3.3

<sup>1</sup> 58 boys and 41 girls below 11 and above 15 years of age are not shown separately in the table.

*Degrees of thyroid enlargement.*—In classifying the degrees of thyroid enlargement encountered during the study, use was made of the standards evolved during the Cincinnati survey. In this system progressively larger thyroids are represented by the numerals 1, 2, 3, 4, and 5, indicating, respectively, "very slight," "slight," "moderate," "marked," and "very marked" sizes over what is assumed to be normal. However, owing to the relatively small number of enlargements of the greater sizes in the present study, only three grades have been utilized. "Very slight" and "slight" enlargements have been combined in one group, "moderate" thickenings in another, and "marked" and "very marked" swellings have constituted a third class.

In Table 2 the marked preponderance of all degrees of enlargement among the girls is clearly shown, particularly in the thickenings of greater size. The greatest number of enlargements is that including the very slight and slight forms, which prevails to a slightly greater extent among the girls than among the boys. When enlargements of greater size are considered, the disparity becomes increasingly great, being several times more frequent among the girls. It will be noted that the "slight" "moderate," and "marked" enlargements prevail to the extent of 21.9, 2.4, and 0.9 per cent among the boys, as against 29.8, 6.3, and 3.3 per cent among the girls.

*Median ages and thyroid status.*—As previously explained, chronological age data are subject to certain limitations when used as an index of brightness in such a study as the present. Nevertheless, utilization of this material should bring to light any marked tendencies toward variations in intelligence between thyroid-normal groups and those with thyroid enlargements. Therefore, in Table 3 the median ages have been computed for the sixth-grade children according to sex, color, and presence or absence of thyroid enlargement. For the white boys and girls, medians have also been given

for the various degrees of thyroid enlargement, though the numbers having marked enlargement are so small as to render the findings based on these groups questionable. The actual numbers of enlargements of each degree are shown in Table 2. The thickenings of the thyroid among the colored children are too few in number to warrant the preparation of medians for the several degrees of involvement.

TABLE 3.—Median ages of 3,796 children—1,728 white boys and 174 colored boys, and 1,630 white girls and 264 colored girls, respectively—in the sixth grade of the Cincinnati public schools, according to sex, color, and degree of thyroid enlargement

Sex and color	Thyroid status				
	Normal	Total	Enlarged		
			Degree of enlargement		
			Slight	Moderate	Marked
White boys.....	12.7	12.6	12.6	12.6	13.3
White girls.....	12.3	12.4	12.4	12.5	12.7
Colored boys.....	14.3	13.9			
Colored girls.....	13.7	13.8			

Consideration of Table 3 shows that the age differences between the thyroid-normal and the thyroid-enlarged children of this group are slight and not consistent in direction. Among both white and colored boys the median ages are less among those with thyroid enlargements than among the normal ones. With the girls the shade of difference is in the reverse direction. Both white boys and white girls with marked enlargements show higher median ages than do those with slight enlargements or with normal thyroids. However, the number of children with marked thyroid involvement is so small that the significance of these figures is questionable. It appears, therefore, that the age data for the children of this group do not throw an appreciable amount of light on the problem of the relationship in question.

*Utilization of percentile ranks.*—The principal data on which is based the attempt to discover whether there are differences between thyroid-normal and thyroid-enlarged children are the results of the intelligence tests. As previously explained, the index of brightness which has been used is the percentile rank, indicating the relative standing of a given child as compared with those of a representative group of unselected children of the same age. Table 4 represents the distribution of percentile ranks for the various groups of children, classified according to age and thyroid condition. In order to simplify the comparisons as much as possible, only two degrees of thyroid enlargement have been scheduled. "Very slight" and "slight" degrees have been combined and designated as "slight," while "moderate," "marked," and "very marked" thickenings have been combined and termed "marked." The percentile ranks have been grouped by twenties between 0 and 100.



TABLE 4.—Percentile ranks of 1,292 thyroid-normal and 436 thyroid-enlarged white boys and 988 thyroid-normal and 642 thyroid-enlarged white girls in the Cincinnati public schools, at each age between 11 and 15 years, with number, percentage, and total of each degree of thyroid enlargement<sup>1</sup>

Thyroid status	Percentile ranks of boys										Percentile ranks of girls													
	Number					Percentage					Number					Percentage								
	Total	0-19	20-39	40-59	60-79	80-99	Total	0-19	20-39	40-59	60-79	80-99	Total	0-19	20-39	40-59	60-79	80-99						
ALL AGES																								
Total.....	1,728	323	425	362	390	225	100.0	18.7	24.6	21.0	22.6	13.1	1,630	250	353	300	346	291	100.0	15.3	21.6	23.9	21.2	17.9
Normal.....	1,292	236	309	287	290	170	100.0	18.3	23.9	22.2	22.4	13.2	988	158	290	222	214	185	100.0	16.0	21.8	22.4	21.7	18.7
Enlarged.....	436	87	116	75	100	58	100.0	19.9	26.6	17.2	23.0	18.3	642	92	144	168	132	106	100.0	14.4	22.4	26.1	20.6	16.6
Slight.....	378	76	97	66	86	53	100.0	20.1	25.7	17.4	22.8	14.0	496	63	107	135	101	80	100.0	12.9	22.0	27.8	20.8	16.5
Marked.....	58	11	19	9	14	5	100.0	19.0	32.8	15.5	24.1	8.6	156	29	37	33	31	26	100.0	18.6	23.7	21.1	19.9	16.7
11 YEARS																								
Total.....	147	1	6	23	47	70	100.0	0.7	4.1	15.6	32.0	47.6	183	1	6	26	50	100	100.0	0.5	3.2	14.0	27.4	54.7
Normal.....	104	1	4	13	26	50	100.0	1.0	3.8	12.5	34.7	48.0	128	1	4	19	32	67	100.0	.9	3.3	15.4	26.0	54.4
Enlarged.....	43	.....	2	10	11	20	100.0	4.6	23.8	25.5	43.0	46.6	60	.....	2	7	18	33	100.0	.....	3.4	11.8	29.8	55.0
Slight.....	39	.....	2	9	10	15	100.0	5.2	23.0	25.7	46.1	43	43	.....	2	4	13	24	100.0	.....	4.7	9.4	30.2	55.7
Marked.....	4	.....	1	1	1	2	100.0	.....	.....	25.0	25.0	50.0	17	.....	.....	3	5	9	100.0	.....	.....	17.6	29.5	52.9
12 YEARS																								
Total.....	628	15	89	174	224	126	100.0	2.3	14.1	27.7	36.7	20.2	690	16	100	208	214	161	100.0	2.3	14.3	29.7	30.7	23.0
Normal.....	469	6	61	140	163	99	100.0	1.3	12.0	26.8	34.8	21.1	423	13	60	121	158	101	100.0	3.0	14.2	28.6	30.3	23.9
Enlarged.....	159	9	28	34	61	27	100.0	5.7	17.7	21.3	38.3	18.9	376	3	40	87	86	60	100.0	1.1	14.5	31.5	31.2	21.7
Slight.....	139	8	26	28	52	25	100.0	5.7	18.7	20.2	37.4	18.0	217	2	31	72	68	44	100.0	.9	14.3	33.2	31.3	20.3
Marked.....	20	1	2	6	9	2	100.0	5.0	10.0	30.0	45.0	10.0	59	1	9	15	18	16	100.0	1.7	15.3	25.4	30.5	27.1

<sup>1</sup> 58 boys and 41 girls below 11 and above 15 years of age are not shown separately in the table.

TABLE 4.—Percentile ranks of 1,292 thyroid-normal and 436 thyroid-enlarged white boys and 983 thyroid-normal and 642 thyroid-enlarged white girls in the Cincinnati public schools, at each age between 11 and 15 years, with number, percentage, and total of each degree of thyroid enlargement—Continued

Thyroid status	Percentile ranks of boys										Percentile ranks of girls													
	Number					Percentage					Number					Percentage								
	Total	0-19	20-39	40-59	60-79	80-99	Total	0-19	20-39	40-59	60-79	80-99	Total	0-19	20-39	40-59	60-79	80-99	Total	0-19	20-39	40-59	60-79	80-99
13 YEARS																								
Total.....	444	56	162	110	93	23	100.0	12.7	36.5	24.7	20.9	5.2	427	63	159	118	68	19	100.0	14.7	37.3	27.6	15.9	4.5
Normal.....	323	35	116	87	69	16	100.0	10.8	36.0	25.9	21.3	5.0	252	39	95	63	45	10	100.0	15.5	37.7	25.0	17.8	4.0
Enlarged.....	121	21	46	23	24	7	100.0	17.4	38.0	29.0	19.9	5.7	175	24	64	55	23	9	100.0	13.7	36.5	31.4	13.2	5.2
Slight.....	106	17	40	22	21	6	100.0	16.1	37.7	29.8	19.8	5.6	140	21	49	44	18	8	100.0	15.1	35.0	31.4	12.8	5.7
Marked.....	15	4	6	1	3	1	100.0	26.6	40.0	6.7	20.0	6.7	35	3	15	11	5	1	100.0	8.6	42.9	31.4	14.3	2.8
14 YEARS																								
Total.....	271	97	109	39	22	4	100.0	35.8	40.2	14.4	8.1	1.5	188	78	64	35	9	2	100.0	41.5	34.1	18.6	4.8	1.0
Normal.....	201	63	83	32	19	4	100.0	31.4	41.7	15.9	9.5	2.0	115	54	39	18	4	1	100.0	46.9	33.9	15.7	3.5	...
Enlarged.....	70	34	26	7	3	...	100.0	48.6	37.1	10.0	4.3	...	73	24	25	17	5	2	100.0	32.9	34.3	23.3	6.9	2.6
Slight.....	58	31	19	6	2	...	100.0	53.4	32.8	10.4	3.4	...	50	15	17	14	2	2	100.0	30.0	34.0	28.0	4.0	4.0
Marked.....	12	3	7	1	1	...	100.0	25.0	58.4	8.3	8.3	...	23	9	8	3	3	...	100.0	39.2	34.8	13.0	13.0	...
15 YEARS																								
Total.....	180	111	41	15	2	1	100.0	61.6	28.3	8.3	1.2	0.6	92	65	22	10	2	3	100.0	70.0	23.9	2.2	3.2	...
Normal.....	148	92	39	14	2	1	100.0	62.2	26.3	9.4	1.4	.7	50	37	10	...	3	1	100.0	74.0	20.0	...	6.0	...
Enlarged.....	32	19	12	1	...	...	100.0	59.4	37.5	3.1	...	...	42	28	12	...	2	...	100.0	66.7	28.6	4.7	...	...
Slight.....	26	17	8	1	...	...	100.0	65.3	30.8	3.9	...	...	27	18	8	1	...	...	100.0	66.7	29.6	3.7	...	...
Marked.....	6	2	4	...	...	...	100.0	33.3	66.7	...	...	...	15	10	4	1	...	...	100.0	66.7	26.7	6.6	...	...

*Distribution of percentile ranks.*—Examination of the distribution of percentile ranks for the various age groups affords interesting confirmation of the assumptions which have been made regarding the relative brightness in these groups. Thus, the younger children attain, as a rule, much higher percentile ranks than the older ones. These facts are clearly demonstrated in the chart which has been prepared to illustrate the percentile ranks of white boys and girls (Chart 2). No chart has been prepared to show the results of intelligence tests among the colored children because their number is too small to permit of accurate plotting. However, the same general tendencies hold among the colored as among the white children. Chart 2 shows clearly the differences in massing of percentile ranks for the various age groups. The changes which take place between the ages of 11 and 15 are interesting. For the 11-year group there is a marked trend toward the higher ranks. With each successively higher age period the percentages of children with higher ranks become progressively less. In other words, the highest portion of the curve has shifted until at the age of 15 years it is quite the reverse of what it was at 11 years.

Similar evidence is adduced from the median percentile ranks. The trend toward reduction in the medians as successively higher ages are reached is striking and consistent. These medians are shown in Table 5.

Coming to a comparison of percentile ranks of thyroid-normal and thyroid-enlarged children, it does not appear, from the curves in Chart 2, that the differences are sufficiently marked to warrant the conclusion that one group is endowed with keener mentality than the other. The chart shows decided similarities for the two groups at each age period, with relatively few fluctuations or striking peculiarities.

The percentage distribution of the entire group of thyroid-normal and thyroid-enlarged white boys and girls, according to percentile rank, is shown in Chart 3. It will be noted that these curves also observe similar trends and that the differences between the normal and thyroid groups are too slight to be recorded as significant.

*Median percentile ranks.*—The median percentile ranks of children with normal-sized thyroids and those with enlargements have been compared in Table 5. For the white boys and girls the comparison has been made for each of the age periods as well as for the total numbers. This has not been done for the colored children because of the small number dealt with. Table 5 reveals, in the first place, that the majority of differences in median percentile ranks between thyroid-normal and thyroid-enlarged groups are very small. In the second place, it fails to show any consistent direction of difference.

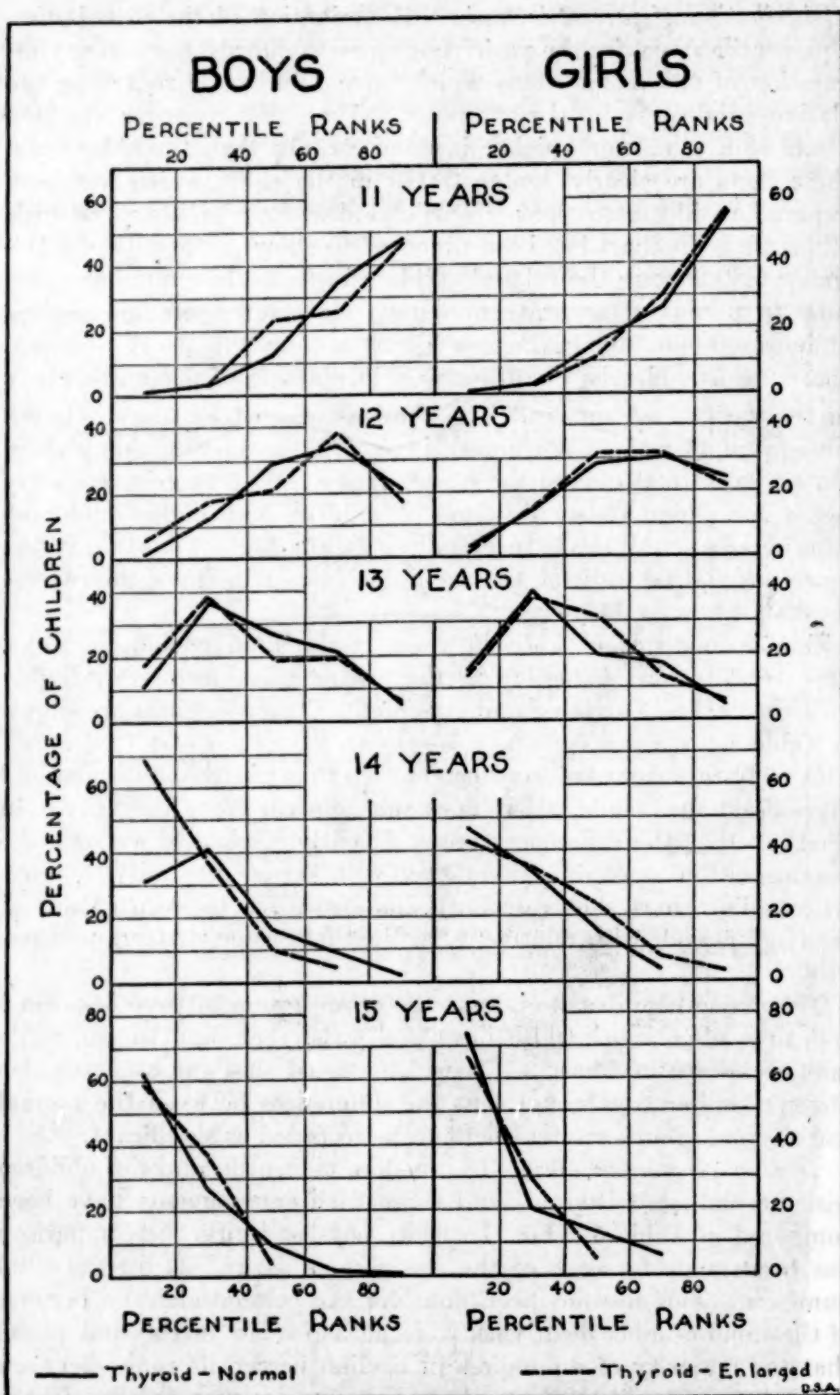


CHART 2.—Percentage distribution of 1292 thyroid-normal white boys and 988 thyroid-normal white girls, and 436 thyroid-enlarged white boys and 642 thyroid-enlarged white girls in the sixth grade of the Cincinnati public schools, at ages between 11 and 15 years, according to percentile ranks



Among the white boys and girls the slight advantage is in favor of the thyroid-normal group, while among the colored boys and girls the advantage, which is larger, is in the opposite direction. In the various age groups of the white children there is also lack of consistency in direction. All the age groups among the boys are consistent in showing whatever advantage exists to be in favor of the thyroid-normal group. In the case of the girls, on the other hand, the situation is reversed, except in the instance of the 12-year group, which is sufficiently large to swing the total slightly in that direction.

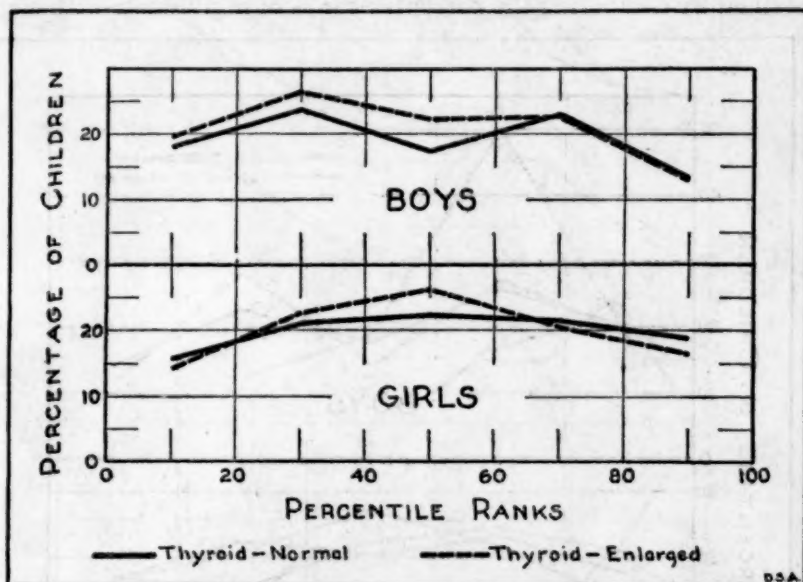


CHART 3.—Percentage distribution, according to percentile ranks, of 1292 thyroid-normal white boys and 988 thyroid-normal white girls, and 436 thyroid-enlarged white boys and 642 thyroid-enlarged white girls in the sixth grade of the Cincinnati public schools

TABLE 5.—Median percentile ranks of 3,796 children—1,728 white boys and 174 colored boys, and 1,630 white girls and 264 colored girls—in the sixth grade of the Cincinnati public schools, according to age, sex, color, and presence or absence of thyroid enlargement

Age (years)	Boys		Girls	
	Thyroid normal	Thyroid enlarged	Thyroid normal	Thyroid enlarged
White children:				
All ages.....	47.2	44.7	51.4	50.0
11.....	79.1	77.5	81.5	81.9
12.....	63.5	62.8	62.8	61.8
13.....	42.4	37.3	38.5	39.8
14.....	27.2	20.8	21.3	28.3
15.....	16.7	10.0	12.0	16.1
Colored children, all ages.....	12.5	20.0	14.1	17.9

Considering, therefore, both the distributions as shown in the tables and charts, and the medians, it appears that the results of this study are largely negative, in that no relationship between intelligence and the presence of thyroid enlargement has been demonstrated.

*Relation of intelligence to size of enlargement.*—Whether individuals with considerable thyroid enlargement vary appreciably in intelligence as compared with those with relatively slight enlargements is another point of interest. The present study was not sufficiently comprehensive to settle this point definitely. However, the results obtained by comparing the percentile ranks of individuals with slight,

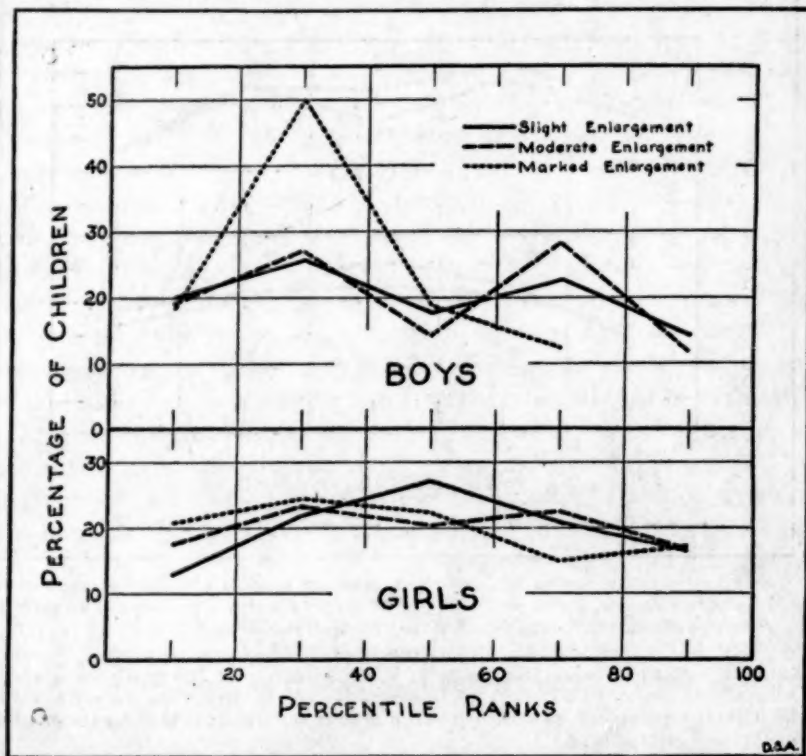


Chart 4.—Percentage distribution, according to percentile rank and degree of thyroid enlargement, of 436 thyroid-enlarged white boys and 642 thyroid-enlarged white girls in the sixth grade of the Cincinnati public schools

moderate, and marked enlargements are both interesting and suggestive. Chart 4 indicates the distribution of percentile ranks of the white boys and girls according to the degree of enlargement. It will be noted that the three curves, with the exception of one striking irregularity, due probably to the small number of individuals in the group in question, have a similar trend.

As a further basis of comparison the medians were calculated for white girls and boys according to the several degrees of enlargement. These medians are displayed in Table 6.

TABLE 6.—Median percentile ranks of 1,728 white boys and 1,630 white girls in the sixth grade of the Cincinnati public schools according to degree of thyroid enlargement

	Boys			Girls		
	Degree of enlargement			Degree of enlargement		
	Slight	Moderate	Marked	Slight	Moderate	Marked
Number of enlargements.....	387	42	16	484	105	53
Median percentile ranks.....	45.9	50.0	32.5	50.9	50.5	45.0

These figures, although indecisive because of the small numbers in the extreme groups, are of interest and raise certain questions which can be answered only by further investigation. Considering these medians in comparison with those given for thyroid-normal white boys and girls in Table 5, there is no evidence that either the boys or girls with slight or moderate degrees of enlargement differ significantly in intelligence from those with normal thyroids. The figures suggest, upon inspection, the possibility of a tendency toward the lowering of intelligence with the marked degree of enlargement. The numbers in these groups, however, are small and there is no certainty that these findings would be constant if the group under investigation were enlarged. Even if this relationship should be established through further investigation, its significance applies only to a very small proportion of the entire group of individuals with thyroid enlargement. Such findings, therefore, would furnish no justification for an assertion of general relationship between thyroid enlargement and lower intelligence.

#### SUMMARY

1. Three thousand seven hundred and ninety-six children in the sixth grade of the Cincinnati public schools were included in a study having for its purpose the determination of whether endemic goiter influences intelligence.

2. Some degree of enlargement was found in 25.2 per cent of the white boys and 39.6 per cent of the white girls included in the survey.

3. Two indices were utilized in determining the intelligence of the children studied: First, the information afforded by school retardation or advancement as indicated by age; second, the records of a standard group test devised to measure intelligence.

4. Analysis of chronological age data, indicative of school retardation or advancement, failed to reveal significant variations between thyroid-normal and thyroid-enlarged children.

5. A comparison of the percentile ranks of the thyroid normal and the thyroid enlarged failed to show differences of sufficient magnitude

to warrant the conclusion that the thyroid normal have a keener mentality than the thyroid enlarged.

6. Children with marked thyroid enlargements were apparently slightly less intelligent on the average than those with normal or slightly enlarged thyroids. However, the number of children with marked thyroid involvement was relatively small, suggesting the desirability of further observations on children with marked thyroid enlargements before drawing conclusions concerning the influence of thyroid size upon intelligence.

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### NOTES ON THE INFLUENCE OF TEMPERATURE AND HUMIDITY ON OVIPOSITION AND EARLY LIFE OF ANOPHELES

By BRUCE MAYNE, Associate Entomologist, United States Public Health Service

It is generally recognized that temperature exerts a direct influence on the life activities of anopheline mosquitoes. This is true not only while the mosquitoes are in the winged stage, but also while they are in the aquatic stage during the cooler as well as the warmer seasons. During the winter period, especially in the deeper waters, *Anopheles* larvae can be obtained from the bottom mud, in which they are sheltered. This protection is offered when the temperature is favorable; larvae are rarely found in pond mud in the winter time when the water's surface is warmer than the mud, or in the mud bottom of shallow streams at other times. This observation is supported by the finding of larvae in the mud of streams or borrow pits well stocked with predaceous top-feeding minnows and during the previous warmer months observed to be devoid of mosquito life. In explanation it is suggested that at the time of the winter inspection the active minnows feeding on the water's surface are likely to overlook the mosquito larvae in the mud at the bottom of the pond.

*Oviposition as influenced by temperature.*—Temperature influences the activities of egg laying and egg hatching, and likewise, of mosquito emergence. It has been proved that all stages of *Anopheles* in southern United States are produced during the colder months. As a comparison to natural conditions the following experimental data are offered as suggestive:

It has been found by the writer that eggs may be laid at 55° to 62° F., but are not laid at 40° to 54° F.; that hatching takes place at temperatures of 66° to 70° F., but not at 58° to 59° F. There is no doubt that oviposition and hatching take place within well-defined limits during the inactive season. *Anopheles* do not commonly pass



the winter in the egg stage at temperatures found under conditions of hibernation. The following test strengthens this deduction. One hundred and eleven specimens of *A. quadrimaculatus* under observation in the laboratory failed to lay eggs at temperatures varying from 40° to 54° F. These mosquitoes had been especially selected from field-collected females whose abdomens were engorged with eggs and blood.

Fifteen females of another similar lot laid 487 normal-appearing eggs at temperatures of 56° to 62° F., and during an observation period of 14 days the eggs failed to hatch. One hundred eggs of this set used as controls hatched at room temperature in 31 hours. Again, another selected lot of 15 females subjected to temperatures of 66° to 70° F. laid 640 eggs, all of which hatched.

In a final experiment with 875 eggs, temperature changes modified the incubation of fertile *Anopheles* eggs to the extent that hatching took place within 24 hours at temperatures as high as 95° F. and was retarded to 30 hours under temperatures of 93° F.

Low temperature apparently either inhibits egg laying or affects the germination of deposited ova. The effect of cold on egg laying is a well-observed phenomenon. Several observers have reported the inability of the female which has survived the dormant season to lay its probable maximum of fertile eggs, as it dies after an oviposition of a few eggs, usually not more than 15 to 20 eggs. To demonstrate this a lot of gravid female *A. quadrimaculatus* were divided into two batches of 10 specimens each; one set (No. 1) was subjected to room temperatures 63° to 78° F., and the other set (No. 2) was kept in the cold closet at 40° to 54° F. for 17 days, then exposed to room temperature for 4 days. The following results were recorded: From set No. 1, 384 eggs were obtained with 100 per cent fertility; from set No. 2, 292 eggs were obtained with 35 per cent fertility.

It was thought desirable to investigate the effect of sudden changes of temperature (not sustained) on oviposition, as it is known that the blood-seeking impulse is stimulated by sudden rises in temperature. For this purpose 10 gravid females subjected to temperatures of 56° to 60° F. for a period of 7 days without issue were exposed to a temperature of 63° to 64° F. for 8 hours and laid 89 eggs. These mosquitoes, when returned to the cold chamber for 10 days longer, did not oviposit, with the exception of 3 eggs laid during the first 2 hours of the renewal of cold conditions.

Possibly a good test as to whether a female has recently emerged or has just appeared after hibernation is to permit it to lay its eggs in the laboratory and observe whether the eggs are fertile. A little

experience enables one to distinguish the seasoned female. The general frayed and darker appearance of the mosquito and also its fecundity are suggestive of its having passed the winter in the adult form. Some instances of this phenomenon may be given: A female specimen of *A. punctipennis*, collected while sprawling, so feeble that one could actually capture it between two fingers, laid 26 eggs and died in the water of the container. All of these eggs, kept at laboratory temperature, hatched normally. A specimen of *A. quadrimaculatus*, collected in Louisiana in early March, when removed to the laboratory laid 18 fertile eggs and was induced to bite before dying the following day. A third specimen, observed in February in northern Mississippi, behaved the same way; it laid 19 eggs when removed to the laboratory and died prior to the hatching of the eggs.

*The effect of desiccation on anopheles eggs and larvae.*—There are several bibliographical references on desiccation in connection with the yellow-fever mosquito, *Aedes*; but only one reference has come to my attention in connection with *Anopheles*. Brumpt<sup>1</sup> found that eggs of *Anopheles maculipennis*, when placed on blotting paper immediately after being laid, survived for 48 hours exposed to the air and 72 hours if to saturated humidity at temperatures of 53.6° to 59°F. He found that eggs about to hatch will survive 6 days under similar conditions.

An investigation of the resistance of *Anopheles* eggs and larvae to the direct action of sunshine was undertaken recently. In these tests eggs of *A. quadrimaculatus* and *A. crucians* were placed for varying lengths of time in dried and drying mud collected from fresh-water streams. They hatched normally and some developed to maturity.

The accompanying table presents the data thus obtained:

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<sup>1</sup> Brumpt, E.: Ponte et resistance des oeufs de l'*Anopheles maculipennis*. Ann. Parasit, October, 1925, E comp. III, No. 4, pp. 396-402.

Table of experiments in an attempt to determine the resistance of eggs to drying when exposed under natural conditions

SPECIES *A. QUADRIMACULATUS*

Number of eggs exposed	Media used	Month and time of exposure	Mean monthly temperatures and per cent of sunshine				Results and remarks
			Mean temperatures			Per cent of sunshine, average daily	
			Week	Maximum	Minimum		
45	Wet garden earth, drying in open dish.	July—42 hours	First... Second... Third... Fourth... Fifth... Mean...	94.0 98.0 91.0 96.0 89.0 88.4	70.0 68.0 67.0 72.0 72.0 71.7	57.5 65.7 58.5 73.3 34.6 60.0	10 larvae were seen to hatch from the eggs. Controls hatch in 40 hours.
100	Mud from creek bottom, exposed in clay dish.	July—65 hours					88 eggs hatched after few hours following addition of water. 18 controls hatch in 36 to 44 hours.
92	Mud barely damp, exposed in clay dish.	July—90 hours					70 hatched 1 day following addition of water. 19 to 20 controls hatched within 48 hours.
800	A wooden box, 9 cubic feet capacity, filled with mud from Savannah River. Eggs exposed in cracks of drying mud.	August—10 days; 13 days; 15 days; and 16 days.	First... Second... Third... Fourth... Fifth... Mean...	95.0 96.0 96.0 91.0 91.0 90.6	72.0 71.0 72.0 69.0 68.0 73.2	67.2 76.7 71.5 37.9 52.0 62.0	40 eggs recovered, placed in water for 1 day and hatched. 22 eggs observed to hatch upon the addition of water. 38 eggs hatched when removed from caked mud. All controls used hatched in 42 to 45 hours.
1,000	In wooden bench tray lined with compressed cardboard, capacity about 12 cubic feet, lumps of mud as damp as molding clay	September.—10 days; 15 days; and 21 days.	First... Second... Third... Fourth... Fifth... Mean...	95.0 94.0 88.0 89.0 87.0 85.9	68.0 69.0 63.0 68.0 65.0 70.6	69.0 66.3 56.5 56.4 73.0 62.0	54 eggs removed to water hatched in few hours. 322 eggs after exposure of 15 days hatched in 45 to 48 hours. Mud solid clumps. 18 eggs found in cracks of mud hatched in 38 hours after removal to water. These had resisted 21 days of drying.
		October.....	First... Second... Third... Fourth... Fifth... Mean...	88.0 78.0 82.0 76.0 80.0 75.4	58.0 51.0 54.0 42.0 58.0 59.1	31.4 33.3 49.2 78.4 46.0 59.0	

Summary of table.—In these tests the soil was allowed to dry out naturally; the time was found to vary, but usually drying was completed within 16 hours. Eggs of *A. quadrimaculatus*, when exposed to the air on wet and drying mud were viable after periods of 42 hours to 16 days. Eggs from the same females hatched nor-

mally in 36 to 48 hours when placed at the same temperatures on the surface of water.

Eggs of *A. crucians*, when exposed in a similar manner, proved to resist drying during periods of 10 days to 21 days and hatched normally after removal to water. Control eggs of this series hatched within 48 hours.

The value of these biological tests may be interpreted as follows: In drainage operations undertaken for mosquito control, water removed by ditches from swampy and seepage areas may harbor recently deposited eggs of *Anopheles*. These may remain viable without the presence of water for a considerable time—after as much as three weeks following the withdrawal of water. Rains may give the brood of eggs present an opportunity to develop, and such forms may continue in their development to the adult stage. Thus an otherwise unaccountable disturbance of the biological relations may result and confuse the sanitarian in evaluating control measures. The mystery of the appearance of a new brood of anopheline mosquitoes may be explained in this manner, and such an invasion may be met more intelligently.

It was thought worth while to determine whether eggs exposed to the conditions of desiccation here outlined could continue developing. For this purpose larvae which had hatched from eggs subjected to drying for periods of 10 to 14 days were placed in suitable containers with a bottom layer of 3 to 4 inches of the mud used in the original cultures. No other food was added. The following results were obtained: *A. quadrimaculatus*, 38 larvae surviving 10 days' desiccation in egg stage produced seven mature pupae within 12 to 13 days. Adults of *A. quadrimaculatus* emerged in two to three days from these pupae. *A. crucians*, 140 larvae, surviving 10 to 14 days' desiccation in the egg stage produced 39 pupae in 13 to 14 days. Adults emerged normally from these pupae within three days.

These observations suggest that it is possible for *Anopheles* to develop in the absence of the food commonly regarded as essential.

### DEATHS DURING WEEK ENDED MAY 8, 1926

Summary of information received by telegraph from industrial insurance companies for week ended May 8, 1925, and corresponding week of 1925. (From the Weekly Health Index, May 11, 1926, issued by the Bureau of the Census, Department of Commerce)

	Week ended May 8, 1926	Corresponding week, 1925
Policies in force.....	64, 290, 279	59, 726, 946
Number of death claims.....	14, 240	11, 744
Death claims per 1,000 policies in force, annual rate	11. 5	10. 3



Deaths from all causes in certain large cities of the United States during the week ended May 8, 1926, infant mortality, annual death rate, and comparison with corresponding week of 1925. (From the Weekly Health Index, May 11, 1926, issued by the Bureau of the Census, Department of Commerce)

City	Week ended May 8, 1926		Annual death rate per 1,000 corresponding week, 1925	Deaths under 1 year		Infant mortality rate, week ended May 8, 1926 <sup>1</sup>
	Total deaths	Death rate <sup>1</sup>		Week ended May 8, 1926	Corresponding week, 1925	
Total (69 cities).....	8,077	14.5	13.3	964	870	80
Akron.....	43			8	5	85
Albany.....	51	22.6	16.4	5	7	105
Atlanta.....	58			13	7	
White.....	20			6		
Colored.....	38	( <sup>2</sup> )		7		
Baltimore.....	245	16.0	16.6	22	25	64
White.....	190			16		57
Colored.....	55	( <sup>2</sup> )		6		97
Birmingham.....	82	20.8	14.2	20	6	
White.....	45			12		
Colored.....	37	( <sup>2</sup> )		8		
Boston.....	272	18.2	15.0	42	27	118
Bridgeport.....	37			8	2	136
Buffalo.....	151	14.6	14.6	22	17	92
Cambridge.....	23	10.0	11.3	0	4	0
Camden.....	31	12.6	13.8	2	5	34
Chicago.....	803	14.0	12.3	100	97	89
Cincinnati.....	137	17.5	14.5	17	7	106
Cleveland.....	217	12.1	10.4	32	19	83
Columbus.....	73	13.6	15.8	7	7	64
Dallas.....	56	15.1	14.3	7	7	
Dayton.....	53	16.0	12.7	5	1	79
Denver.....	65	12.1	14.3	9	9	
Des Moines.....	42	14.7	13.3	3	4	50
Detroit.....	380	15.9	10.8	77	46	124
Duluth.....	20	9.4	5.2	1	1	23
El Paso.....	33	16.4	19.9	9	10	
Erie.....	39			6		114
Fall River.....	26	10.5	12.9	3	11	44
Flint.....	27	10.8	7.6	3	4	50
Fort Worth.....	29	9.9	7.9	0	1	
White.....	21			0		
Colored.....	8	( <sup>2</sup> )		0		
Grand Rapids.....	48	16.3	11.5	6	5	87
Houston.....	40	12.6	20.2	4	11	
White.....	29			4		
Colored.....	11	( <sup>2</sup> )		0		
Indianapolis.....	95	13.8	12.1	8	10	59
White.....	83			7		59
Colored.....	12			1		55
Jacksonville, Fla.....	42	20.9	10.9	7	3	146
White.....	26			3		98
Colored.....	16			4		229
Jersey City.....	85	14.1	13.7	8	6	57
Kansas City, Kans.....	19	8.5	17.5	3	5	
White.....	13			3		63
Colored.....	6	( <sup>2</sup> )		0		0
Kansas City, Mo.....	96	13.6	14.6	1	14	
Los Angeles.....	241			22	29	61
Louisville.....	88	15.2	13.5	6	7	52
White.....	63			5		50
Colored.....	25	( <sup>2</sup> )		1		63
Lowell.....	38	18.0	16.5	9	3	168
Lynn.....	28	14.2	10.6	2		50
Memphis.....	65	19.4	17.0	8	4	
White.....	32			4		
Colored.....	33	( <sup>2</sup> )		4		
Milwaukee.....	143	15.1	9.5	15	8	99
Minneapolis.....	125	15.3	11.5	16	14	89

<sup>1</sup> Annual rate per 1,000 population.

<sup>2</sup> Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.

<sup>3</sup> Data for 64 cities.

<sup>4</sup> Deaths for week ended Friday, May 7, 1926.

<sup>5</sup> In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta 31, Baltimore 15, Birmingham 39, Fort Worth 14, Houston 25, Kansas City, Kans. 14, Louisville 17, Memphis 38, Nashville 30, New Orleans 25, Norfolk 35, Richmond 32, and Washington, D. C., 25.

Deaths from all causes in certain large cities of the United States during the week ended May 8, 1926, infant mortality, annual death rate, and comparison with corresponding week of 1925. (From the Weekly Health Index, May 11, 1926, issued by the Bureau of the Census, Department of Commerce)—Continued

City	Week ended May 8, 1926		Annual death rate per 1,000 corresponding week, 1925	Deaths under 1 year		Infant mortality rate, week ended May 8, 1926
	Total deaths	Death rate		Week ended May 8, 1926	Corresponding week, 1925	
Nashville	52	19.9	13.8	4	5	—
White	25			3		—
Colored	27	( <sup>9</sup> )		1		—
New Bedford	38	16.6	15.3	13	6	226
New Haven	44	12.8	10.5	4	2	55
New Orleans	159	20.0	17.9	7	18	—
White	91			2		—
Colored	68	( <sup>9</sup> )		5		—
New York	1,525	13.5	13.2	166	167	67
Bronx borough	158	9.4	10.0	11	16	36
Brooklyn borough	515	12.2	12.0	70	59	71
Manhattan borough	670	18.0	17.1	74	73	82
Queens borough	141	10.3	9.6	8	16	36
Richmond borough	41	15.5	16.2	3	3	53
Newark, N. J.	115	13.3	10.7	13	19	62
Norfolk	29			3	1	56
White	14			1		30
Colored	15	( <sup>9</sup> )		2		99
Oakland	35	7.2	10.1	4	3	46
Oklahoma City	26			2	1	—
Omaha	68	16.8	8.4	10	4	104
Pateron	41	15.1	10.7	5	2	87
Philadelphia	577	15.2	15.0	72	69	96
Pittsburgh	210	17.3	14.4	18	23	60
Portland, Oreg.	52	9.6	15.5	2	7	20
Providence	75	14.6	13.0	11	13	91
Richmond	58	16.2	11.7	12	5	151
White	34			8		157
Colored	24	( <sup>9</sup> )		4		140
Rochester	83	13.7	14.6	7	6	56
St. Louis	230	14.6	13.0	18	15	—
St. Paul	69	14.6	11.0	1	6	9
Salt Lake City	36	14.3	10.8	6	4	83
San Antonio	62	16.3	17.6	14	10	—
San Diego	32	15.7	19.7	4	3	84
San Francisco	147	13.7	12.9	10	7	60
Schenectady	14	7.9	15.2	1	3	29
Seattle	68			3	3	28
Somerville	19	10.0	13.7	4	2	104
Spokane	29	13.9	11.5	5	1	117
Springfield, Mass.	31	11.4	9.5	2	2	29
Syracuse	62	17.8	16.9	8	9	161
Tacoma	32	16.0	9.5	1	1	23
Toledo	75	13.6	12.3	17	4	165
Trenton	40	15.8	19.4	5	7	84
Utica	37	19.0	16.4	1	3	22
Washington, D. C.	135	16.2	13.1	12	13	97
White	97			5		99
Colored	58	( <sup>9</sup> )		7		91
Waterbury	21			6	4	129
Wilmington, Del.	24	10.3	12.4	5	3	117
Worcester	54	14.8	15.3	6	6	69
Yonkers	22	10.1	12.8	6	7	135
Youngstown	45	14.7	9.5	6	3	76

See footnotes 4 and 5, on p. 991.

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers

#### Reports for Week Ended May 15, 1926

ALABAMA		ARKANSAS—continued	
	Cases		Cases
Chicken pox.....	49	Mumps.....	27
Dengue.....	1	Pellagra.....	10
Diphtheria.....	12	Scarlet fever.....	11
Influenza.....	40	Smallpox.....	4
Malaria.....	45	Trachoma.....	4
Measles.....	381	Tuberculosis.....	5
Mumps.....	46	Typhoid fever.....	2
Pellagra.....	18	Whooping cough.....	17
Pneumonia.....	57		
Poliomyelitis.....	1	CALIFORNIA	
Scarlet fever.....	4		
Smallpox.....	47	Cerebrospinal meningitis—Los Angeles.....	3
Trachoma.....	1	Chicken pox.....	251
Tuberculosis.....	166	Diphtheria.....	107
Typhoid fever.....	8	Influenza.....	27
Whooping cough.....	64	Measles.....	492
		Mumps.....	325
ARIZONA		Poliomyelitis:	
Cerebrospinal meningitis.....	1	San Diego County.....	1
Chicken pox.....	36	Southgate.....	1
Diphtheria.....	3	Scarlet fever.....	144
Influenza.....	3	Smallpox.....	41
Measles.....	21	Typhoid fever.....	25
Mumps.....	5	Whooping cough.....	66
Scarlet fever.....	26		
Smallpox.....	8	COLORADO	
Trachoma.....	161		
Tuberculosis.....	39	Chicken pox.....	23
Typhoid fever.....	5	Diphtheria.....	5
Whooping cough.....	4	German measles.....	3
		Measles.....	18
ARKANSAS		Mumps.....	4
Chicken pox.....	9	Pneumonia.....	3
Diphtheria.....	2	Scarlet fever.....	17
Hookworm disease.....	2	Tuberculosis.....	2
Influenza.....	14	Typhoid fever.....	1
Malaria.....	13	Vincent's angina.....	2
Measles.....	50	Whooping cough.....	37

DELAWARE		INDIANA	
	Cases		Cases
Diphtheria.....	1	Chicken pox.....	37
Measles.....	35	Diphtheria.....	11
Pneumonia.....	2	Influenza.....	10
Scarlet fever.....	13	Measles.....	720
		Mumps.....	1
FLORIDA		Pneumonia.....	17
Cerebrospinal meningitis.....	1	Scarlet fever.....	143
Chicken pox.....	31	Smallpox.....	71
Diphtheria.....	14	Trachoma.....	1
German measles.....	2	Tuberculosis.....	31
Influenza.....	1	Typhoid fever.....	5
Malaria.....	1	Whooping cough.....	108
Measles.....	30		
Mumps.....	17	IOWA	
Pneumonia.....	2	Chicken pox.....	22
Scarlet fever.....	6	Diphtheria.....	11
Smallpox.....	72	German measles.....	71
Tetanus.....	1	Measles.....	294
Tuberculosis.....	4	Mumps.....	23
Typhoid fever.....	18	Pneumonia.....	1
Whooping cough.....	36	Scarlet fever.....	34
		Smallpox.....	48
GEORGIA		Tuberculosis.....	5
Chicken pox.....	46	Typhoid fever.....	1
Diphtheria.....	11	Whooping cough.....	12
Dysentery.....	7		
Hookworm disease.....	4	KANSAS	
Influenza.....	48	Chicken pox.....	123
Malaria.....	33	Diphtheria.....	10
Measles.....	115	German measles.....	26
Mumps.....	23	Influenza.....	5
Paratyphoid fever.....	1	Malaria.....	1
Pellagra.....	13	Measles.....	676
Pneumonia.....	47	Mumps.....	47
Scarlet fever.....	3	Pneumonia.....	26
Septic sore throat.....	8	Scarlet fever.....	59
Smallpox.....	25	Smallpox.....	6
Tuberculosis.....	23	Tetanus.....	1
Typhoid fever.....	6	Tuberculosis.....	48
Whooping cough.....	33	Typhoid fever.....	6
		Whooping cough.....	126
IDAHO			
Cerebrospinal meningitis—Saint Maries.....	1	LOUISIANA	
Chicken pox.....	5	Diphtheria.....	8
Diphtheria.....	12	Influenza.....	23
Measles.....	14	Leprosy.....	1
Mumps.....	12	Lethargic encephalitis.....	1
Poliomylitis—Pocatello.....	1	Malaria.....	31
Scarlet fever.....	18	Paratyphoid fever.....	2
Tuberculosis.....	3	Pneumonia.....	41
Typhoid fever.....	3	Scarlet fever.....	21
Whooping cough.....	3	Smallpox.....	16
		Tuberculosis.....	38
ILLINOIS		Typhoid fever.....	19
Cerebrospinal meningitis—Lake County.....	1	Whooping cough.....	13
Diphtheria.....	65		
Influenza.....	38	MAINE	
Lethargic encephalitis:		Chicken pox.....	4
McLean County.....	1	Diphtheria.....	4
Williamson County.....	1	German measles.....	51
Measles.....	1,137	Influenza.....	62
Pneumonia.....	331	Measles.....	230
Scarlet fever.....	339	Mumps.....	11
Smallpox:		Pneumonia.....	23
Winnebago County.....	10	Scarlet fever.....	13
Scattering.....	39	Tuberculosis.....	11
Tuberculosis.....	339	Typhoid fever.....	1
Typhoid fever.....	9	Whooping cough.....	17
Whooping cough.....	101		



MARYLAND<sup>1</sup>

	Cases
Cerebrospinal meningitis.....	1
Chicken pox.....	81
Diphtheria.....	14
Dysentery.....	4
German measles.....	3
Influenza.....	15
Lethargic encephalitis.....	1
Malaria.....	1
Measles.....	524
Mumps.....	198
Ophthalmia neonatorum.....	3
Pneumonia (broncho).....	78
Pneumonia (lobar).....	73
Pneumonia (undefined).....	4
Scarlet fever.....	56
Septic sore throat.....	4
Tuberculosis.....	63
Typhoid fever.....	3
Whooping cough.....	74

## MASSACHUSETTS

Anthrax.....	1
Cerebrospinal meningitis.....	3
Chicken pox.....	86
Conjunctivitis (suppurative).....	15
Diphtheria.....	50
German measles.....	331
Hookworm disease.....	1
Influenza.....	17
Lethargic encephalitis.....	3
Measles.....	732
Mumps.....	147
Ophthalmia neonatorum.....	16
Pneumonia (lobar).....	138
Poliomyelitis.....	1
Scarlet fever.....	221
Septic sore throat.....	1
Trachoma.....	1
Tuberculosis (pulmonary).....	114
Tuberculosis (other forms).....	85
Typhoid fever.....	8
Whooping cough.....	290

## MICHIGAN

Diphtheria.....	63
Measles.....	1,534
Pneumonia.....	138
Scarlet fever.....	267
Smallpox.....	6
Tuberculosis.....	84
Typhoid fever.....	5
Whooping cough.....	145

## MINNESOTA

Chicken pox.....	107
Diphtheria.....	53
Influenza.....	3
Measles.....	779
Pneumonia.....	7
Scarlet fever.....	333
Smallpox.....	1
Tuberculosis.....	62
Typhoid fever.....	2
Whooping cough.....	55

<sup>1</sup> Week ended Friday.

## MONTANA

	Cases
Cerebrospinal meningitis.....	2
Chicken pox.....	20
Diphtheria.....	2
German measles.....	10
Measles.....	73
Mumps.....	10
Rocky Mountain spotted fever:	
Cartersville.....	1
Crow Agency.....	1
Harlowton.....	1
Melta.....	1
Scarlet fever.....	32
Smallpox.....	12
Tuberculosis.....	5
Whooping cough.....	5

## NEBRASKA

Cerebrospinal meningitis.....	2
Chicken pox.....	44
Diphtheria.....	2
German measles.....	2
Measles.....	138
Mumps.....	9
Pellagra.....	1
Scarlet fever.....	101
Smallpox.....	19
Tetanus.....	1
Tuberculosis.....	7
Whooping cough.....	32

## NEW JERSEY

Cerebrospinal meningitis.....	2
Chicken pox.....	181
Diphtheria.....	97
Dysentery.....	1
Influenza.....	14
Measles.....	2,427
Pneumonia.....	184
Poliomyelitis.....	1
Rabies.....	1
Scarlet fever.....	233
Trachoma.....	1
Typhoid fever.....	5
Whooping cough.....	107

## NEW MEXICO

Chicken pox.....	23
Conjunctivitis.....	1
Diphtheria.....	2
Malaria.....	1
Measles.....	27
Mumps.....	15
Pneumonia.....	3
Rabies (in animals).....	1
Scarlet fever.....	17
Tuberculosis.....	25
Vincent's angina.....	1
Whooping cough.....	30

## NEW YORK

(Exclusive of New York City)

Anthrax.....	1
Botulism.....	2
Cerebrospinal meningitis.....	2
Chicken pox.....	173

## NEW YORK—continued

	Cases
Diphtheria.....	63
German measles.....	508
Influenza.....	33
Malaria.....	2
Measles.....	2,283
Mumps.....	162
Pneumonia.....	316
Scarlet fever.....	200
Septic sore throat.....	4
Smallpox.....	2
Tetanus.....	1
Trachoma.....	3
Typhoid fever.....	8
Vincent's angina.....	4
Whooping cough.....	402

## NORTH CAROLINA

Chicken pox.....	94
Diphtheria.....	15
German measles.....	228
Measles.....	340
Scarlet fever.....	24
Septic sore throat.....	1
Smallpox.....	55
Typhoid fever.....	5
Whooping cough.....	303

## OKLAHOMA

(Exclusive of Oklahoma City and Tulsa)

Chicken pox.....	25
Diphtheria.....	6
Influenza.....	96
Malaria.....	29
Measles.....	140
Mumps.....	5
Pellagra.....	18
Pneumonia.....	40
Scarlet fever.....	32
Smallpox.....	13
Typhoid fever.....	15
Whooping cough.....	47

## OREGON

Cerebrospinal meningitis.....	2
Chicken pox.....	34
Diphtheria.....	18
Influenza.....	26
Measles.....	51
Mumps.....	26
Pneumonia.....	12
Scarlet fever.....	54
Smallpox.....	7
Tuberculosis.....	17
Typhoid fever.....	4
Whooping cough.....	33

## PENNSYLVANIA

Anthrax—Pittsburgh.....	1
Cerebrospinal meningitis:	
Liberty township <sup>2</sup> .....	1
Pittsburgh.....	2
Chicken pox.....	246
Diphtheria.....	134
German measles.....	65
Impetigo contagiosa.....	4

<sup>2</sup> Deaths.

## PENNSYLVANIA—continued

	Cases
Lethargic encephalitis—Philadelphia.....	2
Measles.....	3,801
Mumps.....	70
Ophthalmia neonatorum—Philadelphia.....	2
Pneumonia.....	52
Poliomyelitis—Carroll township <sup>1</sup> .....	1
Scabies.....	9
Scarlet fever.....	485
Tetanus—Philadelphia.....	1
Tuberculosis.....	95
Typhoid fever.....	16
Whooping cough.....	333

## RHODE ISLAND

Diphtheria.....	7
German measles.....	26
Measles.....	77
Mumps.....	2
Scarlet fever.....	7
Tuberculosis.....	6
Whooping cough.....	13

## SOUTH DAKOTA

Chicken pox.....	12
Diphtheria.....	5
Influenza.....	1
Measles.....	104
Mumps.....	50
Pneumonia.....	6
Scarlet fever.....	91
Smallpox.....	5
Whooping cough.....	30

## TENNESSEE

Chicken pox.....	20
Diphtheria.....	10
Dysentery.....	1
Influenza.....	77
Malaria.....	7
Measles.....	626
Mumps.....	14
Pellagra.....	19
Pneumonia.....	32
Rabies.....	1
Scarlet fever.....	32
Smallpox.....	23
Tuberculosis.....	49
Typhoid fever.....	5
Whooping cough.....	33

## TEXAS

Anthrax.....	2
Cerebrospinal meningitis.....	2
Chicken pox.....	98
Diphtheria.....	14
Dysentery.....	1
Influenza.....	8
Measles.....	8
Mumps.....	88
Pellagra.....	1
Pneumonia.....	8
Scarlet fever.....	28
Smallpox.....	114
Typhoid fever.....	2
Tuberculosis.....	27
Whooping cough.....	24

<sup>2</sup> County not specified.

UTAH		WISCONSIN	
	Cases		Cases
Chicken pox.....	39	Chicken pox.....	86
Diphtheria.....	8	Diphtheria.....	5
German measles.....	50	German measles.....	2
Measles.....	18	Influenza.....	2
Mumps.....	26	Measles.....	289
Pneumonia.....	2	Mumps.....	45
Scarlet fever.....	4	Pneumonia.....	39
Smallpox.....	3	Scarlet fever.....	18
Whooping cough.....	160	Tuberculosis.....	36
		Whooping cough.....	52
VERMONT		Scattering:	
Chicken pox.....	23	Chicken pox.....	70
Diphtheria.....	3	Diphtheria.....	29
Measles.....	27	German measles.....	158
Mumps.....	20	Influenza.....	83
Scarlet fever.....	5	Measles.....	942
Whooping cough.....	43	Mumps.....	70
		Pneumonia.....	14
VIRGINIA		Scarlet fever.....	96
Smallpox.....	5	Smallpox.....	4
		Tuberculosis.....	13
WASHINGTON		Typhoid fever.....	1
Cerebrospinal meningitis:		Whooping cough.....	68
Aberdeen.....	1		
Hoquiam.....	1	WYOMING	
Spokane.....	2	Chicken pox.....	7
Chicken pox.....	98	Diphtheria.....	4
Diphtheria.....	9	German measles.....	7
German measles.....	74	Measles.....	5
Measles.....	75	Mumps.....	2
Mumps.....	43	Pneumonia (lobar).....	1
Scarlet fever.....	57	Rocky Mountain spotted fever—	
Smallpox.....	17	Campbell County.....	3
Tuberculosis.....	80	Johnson County.....	3
Typhoid fever.....	2	Natrona County.....	3
Whooping cough.....	60	Scarlet fever.....	44
		Smallpox.....	1
		Whooping cough.....	7

## Reports for Week Ended May 8, 1926

NORTH DAKOTA		WEST VIRGINIA	
	Cases		Cases
Diphtheria.....	7	Cerebrospinal meningitis—Mercer County.....	1
German measles.....	29	Chicken pox.....	35
Measles.....	30	Diphtheria.....	12
Mumps.....	7	Influenza.....	72
Pneumonia.....	8	Measles.....	963
Scarlet fever.....	79	Scarlet fever.....	24
Smallpox.....	2	Smallpox.....	2
Tuberculosis.....	1	Tuberculosis.....	19
Whooping cough.....	8	Typhoid fever.....	7
		Whooping cough.....	41

## SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Cerebro-spinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
<i>March, 1926</i>										
Arkansas.....	0	20	3,180	183	116	18	0	49	36	11
Florida.....	2	73	367	6	198	3	1	61	782	29
South Carolina.....	0	75	16,095	309	71	232	26	22	131	29
<i>April, 1926</i>										
Arizona.....		8	43		24		0	61	1	7
Connecticut.....	5	65	556	0	2,427	0	1	392	0	4
District of Columbia.....	0	62	6		2,264	2	0	102	1	2
Georgia.....	0	37	1,215	33	587	29	1	33	115	16
Indiana.....	4	122	612		6,892		3	947	445	14
Tennessee.....	7	55	2,038	27	1,705	35	2	165	91	25
Vermont.....	0	9	0		107		2	38	0	0

## PLAGUE ERADICATIVE MEASURES IN LOS ANGELES, CALIF.

The following items were taken from the report of plague eradication measures from Los Angeles, Calif.:

Week ended May 8, 1926:

Number of rats trapped.....	450
Number of rats found to be plague infected.....	0
Number of squirrels examined.....	586
Number of squirrels found to be plague infected.....	0
Number of mice trapped.....	654
Number of mice found to be plague infected.....	0

Date of discovery of last plague-infected rodent, Nov. 6, 1925.

Date of last human case, Jan. 15, 1925.

## GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

**Diphtheria.**—For the week ended May 1, 1926, 36 States reported 949 cases of diphtheria. For the week ended May 2, 1925, the same States reported 1,274 cases of this disease. One hundred and one cities, situated in all parts of the country and having an aggregate population of more than 30,200,000, reported 634 cases of diphtheria for the week ended May 1, 1926. Last year for the corresponding week they reported 868 cases. The estimated expectancy for these cities was 895 cases. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

**Measles.**—Thirty-four States reported 18,016 cases of measles for the week ended May 1, 1926, and 5,256 cases of this disease for the week ended May 2, 1925. One hundred and one cities reported 9,969 cases of measles for the week this year, and 3,187 cases last year.

**Poliomyelitis.**—The health officers of 37 States reported 15 cases of poliomyelitis for the week ended May 1, 1926. The same States reported 21 cases for the week ended May 2, 1925.



**Scarlet fever.**—Scarlet fever was reported for the week as follows: Thirty-six States—this year, 3,478 cases; last year, 3,196 cases; 101 cities—this year, 1,700 cases; last year, 1,708 cases; estimated expectancy, 1,133 cases.

**Smallpox.**—For the week ended May 1, 1926, 37 States reported 712 cases of smallpox. Last year for the corresponding week they reported 840 cases. One hundred and one cities reported smallpox for the week as follows: 1926, 154 cases; 1925, 270 cases; estimated expectancy, 126 cases. Three deaths from smallpox were reported by these cities for the week this year—1 at New Orleans, La., 1 at Los Angeles, Calif., and 1 at San Francisco, Calif.

**Typhoid fever.**—One hundred and sixty-nine cases of typhoid fever were reported for the week ended May 1, 1926, by 36 States. For the corresponding week of 1925, the same States reported 265 cases of this disease. One hundred and one cities reported 54 cases of typhoid fever for the week this year and 98 cases for the corresponding week last year. The estimated expectancy for these cities was 57 cases.

**Influenza and pneumonia.**—Deaths from influenza and pneumonia were reported for the week by 94 cities, with a population of nearly 29,500,000, as follows: 1926, 1,180 deaths; 1925, 1,001.

*City reports for week ended May 1, 1926*

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1917 is included. In obtaining the estimated expectancy the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	75,333	9	1	0	4	1	175	2	3
New Hampshire:									
Concord	22,546	0	0	1	0	0	2	0	4
Vermont:									
Barre	10,008	0	0	0	0	0	0	0	0
Burlington	24,089	0	1	0	0	0	1	0	0
Massachusetts:									
Boston	779,620	27	51	12	4	4	186	37	24
Fall River	128,993	3	3	3	5	1	15	0	4
Springfield	142,065	4	3	0	1	2	32	0	3
Worcester	190,757		4						
Rhode Island:									
Pawtucket	69,760	0	1	2	0	0	44	0	5
Providence	267,918	0	10	3	0	1	66	0	7

## City reports for week ended May 1, 1926—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND—cont'd									
Connecticut:									
Bridgeport.....	(1)	3	5	1	8	6	5	0	9
Hartford.....	160,197	0	6	4	3	0	30	0	9
New Haven.....	178,927	17	3	1	0	0	92	1	7
MIDDLE ATLANTIC									
New York:									
Buffalo.....	538,016	30	10	3	4	1	38	0	17
New York.....	5,873,356	86	251	143	71	29	1,379	41	263
Rochester.....	316,786	7	7	0	3	1	144	2	13
Syracuse.....	182,003	5	6	2	2	0	213	22	3
New Jersey:									
Camden.....	128,642	10	4	4	1	2	36	3	4
Newark.....	452,513	67	16	9	7	0	239	10	16
Trenton.....	132,020	3	3	1	0	0	69	7	9
Pennsylvania:									
Philadelphia.....	1,979,364	93	60	57	-----	13	589	13	80
Pittsburgh.....	631,563	43	16	9	-----	8	78	2	30
Reading.....	112,707	5	3	1	-----	0	62	0	5
EAST NORTH CENTRAL									
Ohio:									
Cincinnati.....	409,333	7	7	3	4	12	188	5	17
Cleveland.....	936,485	16	21	33	5	13	107	3	19
Columbus.....	279,836	2	4	3	0	1	323	0	6
Toledo.....	287,380	35	4	14	0	3	303	0	6
Indiana:									
Fort Wayne.....	97,846	3	2	0	0	1	32	0	4
Indianapolis.....	358,819	14	5	3	0	0	350	0	18
South Bend.....	80,091	1	1	1	0	0	16	0	2
Terre Haute.....	71,071	0	1	1	0	0	25	0	2
Illinois:									
Chicago.....	2,993,239	65	92	56	23	17	176	22	69
Peoria.....	81,564	5	1	0	0	0	0	4	1
Springfield.....	63,923	8	1	0	1	1	36	1	1
Michigan:									
Detroit.....	1,245,824	29	44	38	4	14	230	9	65
Flint.....	130,316	6	3	2	0	0	123	0	0
Grand Rapids.....	153,608	3	4	1	0	1	38	0	2
Wisconsin:									
Kenosha.....	50,891	10	1	2	1	0	0	0	1
Madison.....	46,385	3	0	3	0	0	223	1	1
Milwaukee.....	509,192	88	11	5	8	6	206	45	15
Racine.....	67,707	4	2	0	0	1	33	1	1
Superior.....	39,671	0	0	0	0	0	76	0	1
WEST NORTH CENTRAL									
Minnesota:									
Duluth.....	110,502	9	2	0	0	0	22	0	3
Minneapolis.....	425,435	58	15	31	0	2	263	9	6
St. Paul.....	246,001	33	15	23	0	0	176	13	13
Iowa:									
Davenport.....	52,469	1	0	1	0	-----	5	0	-----
Des Moines.....	141,441	2	3	0	0	-----	1	0	-----
Sioux City.....	76,411	4	1	0	0	-----	0	1	-----
Waterloo.....	36,771	2	0	1	0	-----	48	0	-----
Missouri:									
Kansas City.....	367,481	8	6	2	3	3	192	2	13
St. Joseph.....	78,342	2	1	1	0	0	14	1	2
St. Louis.....	821,543	-----	38	40	2	2	1,117	-----	-----
North Dakota:									
Fargo.....	26,403	1	0	1	0	1	0	4	1
Grand Forks.....	14,811	0	0	0	0	-----	0	0	-----
South Dakota:									
Aberdeen.....	15,036	7	0	0	0	-----	19	16	-----
Sioux Falls.....	30,127	0	1	0	0	0	2	0	0
Nebraska:									
Lincoln.....	60,941	6	2	0	0	1	0	0	2
Omaha.....	211,768	19	3	1	0	0	80	0	9
Kansas:									
Topeka.....	55,411	28	1	1	0	0	8	0	0
Wichita.....	88,367	4	1	0	0	0	93	1	4

i No estimate made.

## City reports for week ended May 1, 1926—Continued

Division, State, and city	Population July 1, 1925, estimated	Chick- en pox, cases re-ported	Diphtheria		Influenza		Meas- les, cases re-ported	Mumps, cases re-ported	Pneu- monia, deaths re-ported
			Cases, esti- mated expect- ancy	Cases re-ported	Cases re-ported	Deaths re-ported			
SOUTH ATLANTIC									
Delaware:									
Wilmington	122,049	1	2	7	0	0	17	0	5
Maryland:									
Baltimore	706,296	68	22	8	17	7	182	186	37
Cumberland	33,741	0	1	0	0	0	7	0	3
Frederick	12,035	0	0	0	0	0	11	0	0
District of Columbia:									
Washington	497,906	17	9	14	0	0	630	0	14
Virginia:									
Lynchburg	30,395	8	1	1	0	0	121	1	1
Norfolk	(1)	10	1	0	0	0	4	1	2
Richmond	186,463	4	1	2	0	0	78	7	4
Roanoke	58,208	1	1	0	0	1	90	0	1
West Virginia:									
Charleston	49,019	0	0	0	2	3	12	0	1
Huntington	63,485	0	0	0	0	4	0	0	3
Wheeling	56,208	4	2	0	0	1	164	0	1
North Carolina:									
Raleigh	30,371	2	0	0	0	0	0	0	1
Wilmington	37,061	10	0	0	0	0	0	0	1
Winston-Salem	69,031		1						
South Carolina:									
Charleston	73,125	0	1	0	0	0	2	3	5
Columbia	41,225	8	0	0	0	0	0	0	0
Greenville	27,311	0	1	0	0	0	2	3	1
Georgia:									
Atlanta	(1)	5	1	2	6	1	12	0	10
Brunswick	16,809	0	0	0	0	0	1	0	0
Savannah	93,134	2	0	0	0	2	3	3	1
Florida:									
Tampa	94,743	2	0	1	0	0	6	0	2
EAST SOUTH CENTRAL									
Kentucky:									
Covington	58,309	0	1	3	0	2	14	0	8
Louisville	305,935	2	4	3	2	2	189	1	16
Tennessee:									
Memphis	174,533	47	3	6	0	1	162	21	6
Nashville	136,220	1	1	0	0	7	30	0	5
Alabama:									
Birmingham	205,670	12	1	1	5	6	139	5	8
Mobile	65,955	0	1	0	1	1	0	0	2
Montgomery	46,481	3	0	1	0	0	22	11	0
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	31,643	6	0	0	0		0	0	
Little Rock	74,216	2	0	0	0	0	22	0	4
Louisiana:									
New Orleans	414,493	11	7	7	2	3	12	0	0
Shreveport	57,857	5	1	0	0	0	0	2	4
Oklahoma:									
Oklahoma City	(1)	0	1	0	10	0	0	0	5
Tulsa	124,478	20	1	0	0		6	29	
Texas:									
Dallas	194,450	35	3	3	0	0	0	0	9
Galveston	48,375	0	0	0	0	0	0	1	0
Houston	164,954	1	2	2	0	3	0	0	4
San Antonio	198,069	1	1	1	0	0	3	1	13
MOUNTAIN									
Montana:									
Billings	17,971	1	0	0	0	0	24	0	0
Great Falls	29,383	18	0	0	0	0	31	0	0
Helena	12,037	0	0	0	0	0	0	0	1
Missoula	12,648	0	1	0	0	0	0	3	1
Idaho:									
Boise	23,042	0	0	0	0	0	0	3	0

1 No estimate made.

## City reports for week ended May 1, 1926—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
MOUNTAIN—continued									
Colorado:									
Denver.....	280,911	28	11	5	-----	1	23	1	10
Pueblo.....	43,787	4	1	0	0	0	15	0	1
New Mexico:									
Albuquerque.....	21,000	2	0	0	0	0	3	4	0
Arizona:									
Phoenix.....	38,669	0	-----	0	0	0	1	0	2
Utah:									
Salt Lake City ..	130,948	22	3	8	0	0	2	61	0
Nevada:									
Reno.....	12,665	0	0	0	0	0	0	5	0
PACIFIC									
Washington:									
Seattle.....	(1)	22	4	2	0	-----	58	39	-----
Spokane.....	108,897	6	2	0	0	-----	1	0	-----
Tacoma.....	104,455	1	1	5	0	0	2	0	2
Oregon:									
Portland.....	282,383	28	4	5	0	1	22	0	5
California:									
Los Angeles.....	(1)	55	32	37	9	1	14	11	15
Sacramento.....	72,260	4	1	3	0	2	0	3	2
San Francisco.....	557,530	43	21	10	1	0	173	21	2

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, estimated expect- ancy	Cases re- ported	Cases, estimated expect- ancy	Cases re- ported	Deaths re- ported		Cases, estimated expect- ancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland.....	2	1	0	0	0	3	0	0	0	2	26
New Hampshire:											
Concord.....	0	3	0	0	0	0	0	0	0	0	20
Vermont:											
Barre.....	1	0	0	0	0	1	0	0	0	0	2
Burlington.....	1	3	0	0	0	0	0	0	0	0	3
Massachusetts:											
Boston.....	57	69	0	0	0	17	2	1	0	98	236
Fall River.....	4	3	0	0	0	1	1	0	0	6	32
Springfield.....	6	2	0	0	0	0	0	0	0	15	40
Worcester.....	9		0			0					
Rhode Island:											
Pawtucket.....	1	0	0	0	0	1	0	0	0	1	20
Providence.....	9	1	0	0	0	3	1	0	0	16	63
Connecticut:											
Bridgeport.....	7	13	0	0	0	4	0	0	0	2	43
Hartford.....	4	2	0	0	0	1	0	1	0	2	45
New Haven.....	7	17	0	0	0	5	0	0	0	19	50
MIDDLE ATLANTIC											
New York:											
Buffalo.....	19	10	0	0	0	7	0	0	0	42	154
New York.....	263	224	1	0	0	123	11	8	2	98	1,535
Rochester.....	16	20	0	0	0	4	0	0	0	20	85
Syracuse.....	13	1	0	0	0	3	0	0	0	50	53
New Jersey:											
Camden.....	3	7	0	0	0	0	1	0	0	0	27
Newark.....	22	23	0	0	0	4	0	0	0	34	104
Trenton.....	2	6	0	0	0	2	0	1	1	0	47
Pennsylvania:											
Philadelphia.....	79	89	0	0	0	37	4	3	0	35	574
Pittsburgh.....	24	48	0	0	0	13	1	1	0	88	184
Reading.....	3	16	0	0	0	1	0	0	0	4	24

<sup>1</sup> No estimates made.<sup>2</sup> Pulmonary tuberculosis only.



## City reports for week ended May 1, 1926—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuberculosis, deaths reported	Typhoid fever			Whooping cough, cases reported	Deaths, all causes
	Cases, estimated expectancy	Cases reported	Cases, estimated expectancy	Cases reported	Deaths reported		Cases, estimated expectancy	Cases reported	Deaths reported		
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	15	25	2	1	0	10	1	2	0	18	166
Cleveland	24	69	1	0	0	20	1	0	0	104	237
Columbus	7	23	1	0	0	5	0	0	0	0	83
Toledo	15	13	4	0	0	6	0	0	0	40	91
Indiana:											
Fort Wayne	3	13	2	0	0	3	0	0	0	2	37
Indianapolis	14	11	6	16	0	7	0	0	0	70	115
South Bend	4	8	1	0	0	0	0	0	0	11	17
Terre Haute	3	1	2	0	0	0	0	0	0	4	18
Illinois:											
Chicago	112	109	2	10	0	50	3	4	0	55	723
Peoria	3	2	0	0	0	1	1	0	0	12	24
Springfield	2	0	0	0	0	2	0	0	0	5	26
Michigan:											
Detroit	82	111	4	0	0	17	2	0	0	66	326
Flint	6	7	1	0	0	1	1	0	0	10	28
Grand Rapids	7	17	1	1	0	0	0	0	0	31	33
Wisconsin:											
Kenosha	3	0	1	0	0	0	0	0	0	3	7
Madison	4	7	1	0	0	0	1	0	0	2	12
Milwaukee	28	18	4	0	0	5	0	0	0	41	115
Racine	4	2	1	0	0	2	1	0	0	18	22
Superior	2	4	1	0	0	0	0	0	0	0	9
WEST NORTH CENTRAL											
Minnesota:											
Duluth	4	39	1	0	0	3	0	0	0	7	34
Minneapolis	29	65	9	0	0	4	1	0	0	1	111
St. Paul	23	39	5	0	0	3	1	1	0	26	60
Iowa:											
Davenport	2	5	4	0	0	0	0	0	0	3	---
Des Moines	8	6	3	0	0	0	0	0	0	0	---
Sioux City	3	1	2	0	0	0	0	0	0	0	---
Waterloo	1	2	1	0	0	0	0	0	0	11	---
Missouri:											
Kansas City	11	22	2	1	0	11	1	0	0	21	120
St. Joseph	2	11	0	0	0	2	0	0	0	0	23
St. Louis	33	167	4	3	0	11	2	1	0	---	260
North Dakota:											
Fargo	1	8	0	0	0	0	0	0	0	0	10
Grand Forks	1	0	0	0	0	0	0	0	0	0	---
South Dakota:											
Aberdeen	1	5	0	0	0	0	0	0	0	13	---
Sioux Falls	1	2	1	1	0	0	0	0	0	0	---
Nebraska:											
Lincoln	2	1	1	2	0	1	0	0	0	6	16
Omaha	4	68	7	11	0	1	0	0	0	4	52
Kansas:											
Topeka	3	13	1	0	0	1	0	1	0	0	15
Wichita	2	1	3	0	0	0	0	0	0	8	27
SOUTH ATLANTIC											
Delaware:											
Wilmington	3	8	0	0	0	1	0	1	0	4	36
Maryland:											
Baltimore	29	33	1	0	0	19	2	2	1	37	232
Cumberland	1	1	0	0	0	0	0	0	0	2	16
Frederick	2	0	0	0	0	0	1	0	0	3	---
Dist. of Columbia:											
Washington	23	39	1	0	0	10	1	0	0	39	137
Virginia:											
Lynchburg	0	2	1	0	0	1	0	0	0	23	3
Norfolk	1	11	1	0	0	1	1	0	0	35	---
Richmond	2	9	0	0	0	5	1	0	0	2	63
Roanoke	1	4	1	2	0	1	0	0	0	2	15
West Virginia:											
Charleston	1	0	1	0	0	1	0	0	0	5	6
Huntington	0	1	1	0	0	4	0	0	0	0	23
Wheeling	2	2	0	0	0	1	0	0	0	0	17
North Carolina:											
Raleigh	0	0	1	1	0	0	0	0	0	13	6
Wilmington	0	0	1	0	0	0	0	0	0	4	5
Winston-Salem	0	0	5	0	0	0	0	0	0	0	---

## City reports for week ended May 1, 1926—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re-ported	Typhoid fever			Whoop- ing cough, cases re-ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
SOUTH ATLANTIC— continued											
South Carolina:											
Charleston.....	0	0	0	0	0	2	0	0	0	0	27
Columbia.....	0	0	1	1	0	0	0	0	0	0	3
Greenville.....	1	0	1	1	0	1	0	0	0	2	9
Georgia:											
Atlanta.....	3	4	4	2	0	5	1	2	0	2	73
Brunswick.....	0	0	0	0	0	0	0	0	0	0	3
Savannah.....	1	0	0	0	0	2	0	0	0	0	25
Florida:											
Tampa.....	0	2	0	8	0	7	1	5	2	1	38
EAST SOUTH CENTRAL											
Kentucky:											
Covington.....	1	1	0	0	0	3	0	0	0	0	33
Louisville.....	5	9	1	1	0	4	1	1	0	7	99
Tennessee:											
Memphis.....	4	16	3	10	0	2	1	0	0	15	56
Nashville.....	2	3	1	1	0	3	0	0	0	3	47
Alabama:											
Birmingham.....	2	3	7	4	0	9	1	2	0	7	71
Mobile.....	0	0	1	0	0	2	1	0	0	0	19
Montgomery.....	1	1	1	3	0	0	0	1	0	0	5
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith.....	0	1	1	0			0	0		2	
Little Rock.....	0	9	0	0	0	0	0	1	0	1	
Louisiana:											
New Orleans.....	4	17	2	7	1	18	2	1	0	4	115
Shreveport.....	0	2	2	0	0	1	0	1	0	0	25
Oklahoma:											
Oklahoma City.....	2	3	5	1	0	3	0	0	0	1	25
Tulsa.....	1	4	2	1			0	0		9	
Texas:											
Dallas.....	2	2	2	14	0	5	1	0	0	21	51
Galveston.....	1	0	0	6	0	1	0	1	0	0	19
Houston.....	1	1	1	6	0	7	1	0	0	0	59
San Antonio.....	1	2	0	1	0	8	0	0	0	0	58
MOUNTAIN											
Montana:											
Billings.....	1	3	1	0	0	0	0	0	0	2	2
Great Falls.....	1	1	2	0	0	1	0	0	0	8	11
Helena.....	1	0	0	0	0	0	0	0	0	0	8
Missoula.....	1	1	1	0	0	0	0	0	0	0	6
Idaho:											
Boise.....	1	0	0	1	0	0	0	1	0	0	5
Colorado:											
Denver.....	11	14	2	0	0	13	0	1	1	51	85
Pueblo.....	1	2	0	0	0	0	1	0	0	0	12
New Mexico:											
Albuquerque.....	1	11	0	0	0	5	1	0	0	6	8
Arizona:											
Phoenix.....		0		0	0	1		0	0	0	17
Utah:											
Salt Lake City.....	2	3	1	3	0	3	0	0	0	105	25
Nevada:											
Reno.....	0	0	0	0	0	0	0	0	0	0	3
PACIFIC											
Washington:											
Seattle.....	8	24	3	2			1	1		8	
Spokane.....	3	13	6	0			0	1		7	
Tacoma.....	2	4	1	11	0	2	0	0	1	13	25
Oregon:											
Portland.....	7	28	9	6	0	5	1	1	0	1	58
California:											
Los Angeles.....	16	20	3	19	1	53	1	2	0	5	239
Sacramento.....	1	2	0	1	0	3	0	2	0	0	28
San Francisco.....	13	15	3	5	1	15	1	4	1	0	169

## City reports for week ended May 1, 1926—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
<b>NEW ENGLAND</b>									
Massachusetts:									
Springfield.....	1	1	0	0	0	0	0	0	0
<b>MIDDLE ATLANTIC</b>									
New York:									
New York.....	4	3	7	4	0	0	1	2	1
Pennsylvania:									
Philadelphia.....	0	0	1	0	0	0	0	0	0
Pittsburgh.....	1	1	0	0	0	0	0	0	0
<b>EAST NORTH CENTRAL</b>									
Ohio:									
Cleveland.....	0	0	0	0	0	0	0	1	0
Columbus.....	0	0	0	2	0	0	0	0	0
Illinois:									
Chicago.....	0	0	1	0	0	0	0	0	0
Michigan:									
Detroit.....	1	0	1	2	1	0	0	1	0
<b>WEST NORTH CENTRAL</b>									
Minnesota:									
Minneapolis.....	0	0	1	1	0	0	0	0	0
Missouri:									
Kansas City.....	0	0	0	1	0	0	0	0	0
St. Louis.....	0	1	0	0	0	0	0	0	0
South Dakota:									
Aberdeen.....	0	0	0	0	0	0	0	1	1
<b>SOUTH ATLANTIC</b>									
Maryland:									
Baltimore <sup>1</sup> .....	2	1	1	0	0	0	0	0	0
District of Columbia:									
Washington.....	0	0	1	1	0	0	0	0	0
Virginia:									
Lynchburg.....	0	0	0	0	0	1	0	0	0
South Carolina:									
Charleston.....	0	0	0	0	0	1	0	0	0
Georgia:									
Atlanta.....	0	0	0	0	0	2	0	0	0
<b>EAST SOUTH CENTRAL</b>									
Kentucky:									
Covington.....	0	0	0	0	0	0	0	0	1
Louisville.....	0	0	2	0	0	0	0	0	0
Tennessee:									
Memphis.....	0	0	0	0	0	1	0	0	0
Alabama:									
Birmingham.....	2	0	0	0	1	0	0	0	0
Mobile.....	0	0	0	0	0	1	0	0	0
<b>WEST SOUTH CENTRAL</b>									
Louisiana:									
New Orleans.....	0	0	0	0	0	0	0	10	0
Shreveport.....	0	1	0	0	0	1	0	0	0
Texas:									
Dallas.....	0	1	0	0	1	0	0	0	0
<b>MOUNTAIN</b>									
Colorado:									
Denver.....	0	0	0	1	0	0	0	0	0
<b>PACIFIC</b>									
Washington:									
Spokane.....	6	0	0	0	0	0	0	0	0
California:									
Los Angeles.....	0	1	0	0	0	0	0	1	0
Sacramento.....	1	2	0	0	0	0	0	0	0
San Francisco.....	2	0	0	0	1	0	0	0	0

<sup>1</sup> Typhus fever, 1 case at Baltimore, Md.

The following table gives the rates per 100,000 population for 103 cities for the five-week period ended May 1, 1926, compared with those for a like period ended May 2, 1925. The population figures used in computing the rates are approximate estimates as of July 1, 1925 and 1926, respectively, authoritative figures for many of the cities not being available. The 103 cities reporting cases had an estimated aggregate population of nearly 30,000,000 in 1925 and nearly 30,500,000 in 1926. The 96 cities reporting deaths had more than 29,250,000 estimated population in 1925 and more than 29,750,000 in 1926. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

*Summary of weekly reports from cities, March 28 to May 1, 1926—Annual rates per 100,000 population—Compared with rates for the corresponding period of 1925<sup>1</sup>*

## DIPHTHERIA CASE RATES

	Week ended—									
	Apr. 4, 1925	Apr. 3, 1926	Apr. 11, 1925	Apr. 10, 1926	Apr. 18, 1925	Apr. 17, 1926	Apr. 25, 1925	Apr. 24, 1926	May 2, 1925	May 1, 1926
103 cities.....	170	<sup>1</sup> 126	152	<sup>1</sup> 117	155	110	155	118	152	<sup>1</sup> 109
New England.....	165	80	161	125	125	47	139	73	122	<sup>1</sup> 75
Middle Atlantic.....	240	145	219	125	227	118	217	162	212	114
East North Central.....	86	<sup>1</sup> 112	91	88	108	86	106	87	102	97
West North Central.....	213	156	219	200	163	241	181	178	195	200
South Atlantic.....	77	96	69	86	96	90	102	68	98	<sup>1</sup> 68
East South Central.....	21	<sup>1</sup> 61	32	<sup>1</sup> 121	42	47	37	26	37	73
West South Central.....	79	60	101	60	70	30	75	47	66	56
Mountain.....	120	146	102	118	231	191	250	82	111	118
Pacific.....	356	202	163	137	160	135	157	146	196	154

## MEASLES CASE RATES

	537	<sup>1</sup> 1,695	510	<sup>1</sup> 1,784	564	1,760	620	1,790	559	<sup>1</sup> 1,721
103 cities.....	537	<sup>1</sup> 1,695	510	<sup>1</sup> 1,784	564	1,760	620	1,790	559	<sup>1</sup> 1,721
New England.....	923	1,463	975	1,572	884	1,813	1,174	1,606	968	<sup>1</sup> 1,675
Middle Atlantic.....	731	1,847	677	1,760	811	1,609	779	1,593	731	1,417
East North Central.....	685	<sup>1</sup> 1,593	658	1,570	681	1,469	833	1,457	706	1,496
West North Central.....	74	2,391	56	3,240	88	3,309	98	4,079	76	3,988
South Atlantic.....	198	2,671	196	2,652	242	2,943	278	2,538	288	<sup>1</sup> 2,591
East South Central.....	63	<sup>1</sup> 3,063	36	<sup>1</sup> 3,218	80	2,781	173	3,445	184	2,885
West South Central.....	84	43	48	237	62	133	35	163	26	159
Mountain.....	213	555	55	419	259	528	213	1,074	518	865
Pacific.....	190	248	229	391	146	375	193	504	155	669

## SCARLET FEVER CASE RATES

	394	<sup>1</sup> 296	353	<sup>1</sup> 274	329	307	348	283	297	<sup>1</sup> 293
103 cities.....	394	<sup>1</sup> 296	353	<sup>1</sup> 274	329	307	348	283	297	<sup>1</sup> 293
New England.....	515	392	510	310	338	373	393	222	415	<sup>1</sup> 287
Middle Atlantic.....	434	210	358	176	341	187	335	201	322	231
East North Central.....	412	<sup>1</sup> 331	391	830	376	343	410	287	302	289
West North Central.....	713	774	627	833	631	895	671	883	592	867
South Atlantic.....	165	<sup>1</sup> 175	144	147	157	182	165	160	125	<sup>1</sup> 222
East South Central.....	242	<sup>1</sup> 231	257	<sup>1</sup> 176	210	156	236	228	242	171
West South Central.....	48	86	84	116	57	133	114	172	106	146
Mountain.....	268	146	250	100	305	173	388	209	324	218
Pacific.....	182	251	166	156	138	340	141	262	119	206

<sup>1</sup> The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1925, and 1926, respectively.

<sup>2</sup> Madison, Wis., and Covington, Ky., not included.

<sup>3</sup> Covington, Ky., not included.

<sup>4</sup> Worcester, Mass., and Winston-Salem, N. C., not included.

<sup>5</sup> Worcester, Mass., not included.

<sup>6</sup> Madison, Wis., not included.

<sup>7</sup> Winston-Salem, N. C., not included.



Summary of weekly reports from cities, March 28 to May 1, 1926—Annual rates per 100,000 population—Compared with rates for the corresponding period of 1925—Continued

## SMALLPOX CASE RATES

	Week ended—									
	Apr. 4, 1925	Apr. 3, 1926	Apr. 11, 1925	Apr. 10, 1926	Apr. 18, 1925	Apr. 17, 1926	Apr. 25, 1925	Apr. 24, 1926	May 2, 1925	May 1, 1926
103 cities.....	55	42	49	33	46	26	60	31	48	27
New England.....	12	0	2	0	0	0	2	0	0	0
Middle Atlantic.....	21	0	10	0	18	0	12	0	8	0
East North Central.....	22	17	21	18	25	14	37	22	29	19
West North Central.....	84	46	94	51	82	44	86	44	72	32
South Atlantic.....	46	41	40	68	50	43	75	47	60	29
East South Central.....	378	105	525	194	362	52	420	99	399	96
West South Central.....	44	90	48	133	13	95	40	112	31	146
Mountain.....	18	55	18	27	9	27	28	46	9	36
Pacific.....	243	348	141	137	155	137	251	140	196	102

## TYPHOID FEVER CASE RATES

	8	10	9	7	11	7	16	8	17	9
103 cities.....	8	10	9	7	11	7	16	8	17	9
New England.....	5	7	2	9	7	9	17	5	10	15
Middle Atlantic.....	4	8	9	5	11	7	14	8	22	6
East North Central.....	3	13	6	3	4	2	6	1	4	4
West North Central.....	2	8	2	10	2	4	6	6	12	6
South Atlantic.....	29	17	19	6	12	4	13	8	27	19
East South Central.....	16	33	16	11	32	0	74	26	42	21
West South Central.....	31	34	35	17	53	34	48	26	48	17
Mountain.....	0	36	18	18	37	9	28	0	0	18
Pacific.....	19	11	8	13	11	13	22	22	17	27

## INFLUENZA DEATH RATES

	33	89	26	74	26	53	29	38	21	33
96 cities.....	33	89	26	74	26	53	29	38	21	33
New England.....	34	109	31	83	26	52	29	40	19	39
Middle Atlantic.....	21	100	16	76	24	59	17	34	14	27
East North Central.....	36	110	25	81	23	67	31	42	21	46
West North Central.....	38	38	36	31	49	23	47	31	30	17
South Atlantic.....	27	58	25	58	10	43	40	30	23	29
East South Central.....	63	99	68	239	74	47	79	104	47	99
West South Central.....	34	109	44	71	10	57	24	66	29	28
Mountain.....	176	27	83	46	37	46	74	46	46	9
Pacific.....	25	21	11	14	25	21	11	4	11	11

## PNEUMONIA DEATH RATES

	197	335	194	277	184	241	196	201	160	175
96 cities.....	197	335	194	277	184	241	196	201	160	175
New England.....	242	468	204	359	199	303	180	234	144	194
Middle Atlantic.....	214	432	189	338	203	288	222	240	206	219
East North Central.....	171	321	178	245	178	232	199	191	138	152
West North Central.....	186	159	220	184	165	131	131	136	70	106
South Atlantic.....	219	289	223	235	217	207	180	205	180	174
East South Central.....	247	358	315	431	189	332	263	259	179	233
West South Central.....	160	198	160	170	92	194	150	137	121	161
Mountain.....	157	155	259	137	203	155	213	109	120	118
Pacific.....	142	57	105	149	87	117	131	71	113	75

<sup>1</sup> Madison, Wis., and Covington, Ky., not included.

<sup>2</sup> Covington, Ky., not included.

<sup>3</sup> Worcester, Mass., and Winston-Salem, N. C., not included.

<sup>4</sup> Worcester, Mass., not included.

<sup>5</sup> Madison, Wis., not included.

<sup>6</sup> Winston-Salem, N. C., not included.

*Number of cities included in summary of weekly reports, and aggregate population of cities in each group, approximated as of July 1, 1925 and 1926, respectively*

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1925	1926	1925	1926
Total.....	103	96	29,944,996	30,473,129	20,251,658	20,764,201
New England.....	12	12	2,176,124	2,206,124	2,176,124	2,206,124
Middle Atlantic.....	10	10	10,346,970	10,476,970	10,346,970	10,476,970
East North Central.....	16	16	7,481,656	7,655,436	7,481,656	7,655,436
West North Central.....	14	11	2,594,962	2,634,662	2,461,380	2,499,036
South Atlantic.....	21	21	2,716,070	2,776,070	2,716,070	2,776,070
East South Central.....	7	7	993,103	1,004,953	993,103	1,004,953
West South Central.....	8	6	1,184,057	1,212,057	1,078,198	1,103,695
Mountain.....	9	9	563,912	572,773	563,912	572,773
Pacific.....	6	4	1,888,142	1,934,084	1,434,245	1,469,144

## FOREIGN AND INSULAR

### THE FAR EAST

*Report for week ended April 24, 1926.*—The following report for the week ended April 24, 1926, was transmitted by the Far Eastern Bureau of the health section of the League of Nations' secretariat, located at Singapore, to the headquarters at Geneva:

Ports	Plague		Cholera		Small-pox		Ports	Plague		Cholera		Small-pox	
	Cases	Deaths	Cases	Deaths	Cases	Deaths		Cases	Deaths	Cases	Deaths	Cases	Deaths
Bombay	2	0	0	0	29	17	Tsuruga	0	0	0	0	0	0
Madras	0	0	0	0	3	1	Hakodate	0	0	0	0	0	0
Rangoon	7	1	4	0	0	0	Keelung (Formosa)	0	0	0	0	0	0
Karachi	1	0	0	0	14	4	Fusan	0	0	0	0	0	0
Negapatam	0	0	0	0	0	0	Chemulpo	0	0	0	0	0	0
Basra	0	0	0	0	2	1	Dairen	0	0	0	0	10	2
Singapore	0	0	0	0	0	0	Antung	0	0	0	0	2	0
Port Swettenham	0	0	0	0	0	0	Mukden	0	0	0	0	2	0
Penang	0	0	0	0	0	0	Changchun	0	0	0	0	1	0
Batavia	0	0	0	0	0	0	Adelaide	0	0	0	0	0	0
Surabaya	0	0	0	0	0	0	Brisbane	0	0	0	0	0	0
Samarang	0	0	0	0	0	0	Fremantle	0	0	0	0	0	0
Cheribon	1	0	0	0	0	0	Melbourne	0	0	0	0	0	0
Belawan Deli	0	0	0	0	0	0	Sydney	0	0	0	0	0	0
Palembang	0	0	0	0	0	0	Rockhampton	0	0	0	0	0	0
Sabang (Rhio)	0	0	0	0	0	0	Townsville	0	0	0	0	0	0
Makassar	0	0	0	0	0	0	Port Darwin	0	0	0	0	0	0
Menada	0	0	0	0	0	0	Broome	0	0	0	0	0	0
Banjarmasin	0	0	0	0	0	0	Port Moresby	0	0	0	0	0	0
Balik Papan	0	0	0	0	0	0	Auckland	0	0	0	0	0	0
Pontianak (Borneo)	0	0	0	0	0	0	Wellington	0	0	0	0	0	0
Sandakan (North Borneo)	0	0	0	0	0	0	Christchurch	0	0	0	0	0	0
Kuching (Sarawak)	0	0	0	0	0	0	Invercargill	0	0	0	0	0	0
Timor Dilly	0	0	0	0	0	0	Noumea (New Caledonia)	0	0	0	0	0	0
Manila	0	0	0	0	0	0	Honolulu	0	0	0	0	0	0
Iloilo	0	0	0	0	0	0	Suez	3	1	0	0	0	0
Jolo	0	0	0	0	0	0	Tor (Quarantine Station)	0	0	0	0	0	0
Cebu	0	0	0	0	0	0	Alexandria	0	0	0	0	0	0
Zamboanga	0	0	0	0	0	0	Port Said	0	0	0	0	0	0
Bangkok	2	0	107	59	7	4	Port Sudan	0	0	0	0	0	0
Saigon and Cholon	0	0	23	20	0	0	Nombasa (Kenya)	0	0	0	0	0	0
Hai Phong	0	0	0	0	3	0	Massowah	0	0	0	0	0	0
Tourane	0	0	0	0	2	1	Djibuti	0	0	0	0	0	0
Hongkong	0	0	0	0	1	4	Berbera	0	0	0	0	0	0
Shanghai	0	0	0	0	6	2	Mosambique	0	0	0	0	0	0
Amoy	0	0	0	0	1	0	Lourenco Marques	0	0	0	0	0	0
Nagasaki	0	0	0	0	2	0	Durban	0	0	0	0	0	0
Yokohama	0	0	0	0	2	0	East London	0	0	0	0	0	0
Simonoseki	0	0	0	0	1	0	Port Elizabeth	0	0	0	0	0	0
Moji	0	0	0	0	1	0	Cape Town	0	0	0	0	0	0
Kobe	0	0	0	0	0	0	Port Louis (Mauritius)	0	0	0	0	0	0
Osaka	0	0	0	0	0	0	Seychelles	0	0	0	0	0	0
Niigata	0	0	0	0	0	0							

## CANADA

*Communicable diseases—Week ended May 1, 1926.*—The following table shows the number of certain communicable diseases reported in seven Provinces of Canada during the week ended May 1, 1926. The information was supplied by the Canadian Ministry of Health.

Disease	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	Total
Cerebrospinal fever.....			2					2
Influenza.....	239	1			1			241
Lethargic encephalitis.....					1			1
Smallpox.....				14	18	1	8	41
Typhoid fever.....	1		13	7	1			22

## CHILE

*Typhoid fever—Typhus fever—January 1-15, 1926.*—During the period January 1 to 15, 1926, 19 cases of typhoid fever with one death, occurring in seven localities, and 23 cases of typhus fever, occurring in four localities, were reported in the Republic of Chile. The distribution of the occurrence was reported as follows:

Locality	Typhoid fever	Typhus fever	Population	Locality	Typhoid fever	Typhus fever	Population
Achao.....		1	1,657	Ovalle.....	3		9,172
Ancud.....		2	4,295	Salamanca <sup>1</sup> .....		17	8,819
Coquimbo.....	3		15,438	San Javier.....	2		4,806
Curico.....	1		15,879	Talca.....	8		36,079
Linares.....	1		12,051	Valparaiso.....	11	3	182,422

<sup>1</sup> Commune.<sup>2</sup> Death.

## COLOMBIA

*Sanitary improvements—Buenaventura.*—Improvements in sanitary conditions at Buenaventura, Colombia, have been reported as follows:

*Hospital relief.*—In March, 1926, a small hospital, of eight rooms, was opened. It was stated that there had been no hospital at Buenaventura previously. Medical service for the hospital is supplied by two physicians, one of whom is the chief of sanitation.

*General sanitary improvement.*—Work was begun, February 15, 1926, by a sanitary expert, under direction of the national director of public health of Colombia. The scope of the work includes extermination of rats, mosquitoes, and flies, and general cleaning. One foreman, four inspectors, and 24 laborers are employed.

*Water and mosquitoes.*—The general water supply of Buenaventura is rainwater collected from the roofs of houses, which are generally of corrugated iron. The water is conducted in metal gutters into metal barrels or drums, of which most houses have several. The rainfall is stated to be extremely heavy (400 inches per year). When



a shortage of water occurs water is brought by rail from the interior. The use of small fish in water barrels was found impracticable. It is stated that no malaria mosquitoes have been found in Buenaventura and that cases of malaria present there have been contracted elsewhere.

*Mosquito destruction.*—At the beginning of this work 25 per cent of the houses in Buenaventura were stated to harbor mosquitoes; the proportion is now stated at  $4\frac{3}{4}$  per cent. Fewer pupæ are stated to be found. Much screening has been done. Some difficulty was experienced with the owners of lighters who allowed water to collect on the lighters and thus furnish breeding places for mosquitoes. Fines have been imposed to suppress this practice.

*Extermination of rats.*—Progress has been made in rat extermination. On April 12, 1926, a small crematory was installed to burn garbage, thus depriving rats of food. A bonus is offered for every dead rat brought in. On April 14, 50 rats were brought in.

*Soil pollution.*—Very few houses are provided with facilities for removing human waste. This remains on the ground outside of houses until washed away by rain or high tides. A small canal leading to the sea admits water at high tide to areas in the rear of houses which do not abut on the sea. The soil is necessarily much polluted and, as the poorer part of the population go barefoot, there is much hookworm disease.

*Dysentery.*—The poorer natives dig holes in the ground for water for washing and even for drinking. Many cases of dysentery result. From February to April 15, 1926, 18 cases, with 4 deaths were reported. Work has been undertaken to pipe water from the interior into Buenaventura.

*Extension of sanitary work.*—Work is expected to be begun at Cali and other points in the Cauca Valley.

#### COSTA RICA

*Communicable diseases—January–March, 1926.*—Communicable diseases were reported in the Republic of Costa Rica, during the period January, February, and March, 1926, as follows:

Disease	January, 1926		February, 1926		March, 1926		Total	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cerebrospinal meningitis.....			2	2	2	2	4	4
Chicken pox.....	1		1		2		4	
Diphtheria.....	2	1	2		5	2	9	3
Dysentery.....	22	17	14	12	12	11	48	40
Leprosy.....	1						1	
Lethargic encephalitis.....			1	1			1	1
Malaria.....	24	24	10	10	4	4	38	38
Paratyphoid fever.....	1	1	4	3			5	4
Scarlet fever.....					1		1	
Tetanus.....	12	10	3	3	22	22	37	35
Tuberculosis.....	56	49	35	30	45	35	136	114
Typhoid fever.....	9	2	9		17	5	35	7
Whooping cough.....	12	10	1		5		18	10

Population: 507,193.

## JAMAICA

*Smallpox (reported as alastrim)*—March 28–April 24, 1926.—During the period March 28 to April 24, 1926, there were notified in the Island of Jamaica, exclusive of Kingston, 111 cases of smallpox (reported as alastrim) and in Kingston two cases.

*Other communicable diseases.*—During the period under report other communicable diseases were reported in the Island as follows: Chicken pox, 72 cases; in Kingston, 5 cases; diphtheria, 1 case; tuberculosis, pulmonary, 27 cases; in Kingston, 7 cases; typhoid fever, 46 cases; in Kingston, 12 cases. Population of Jamaica, estimated, 1921, 858,118; population of Kingston, census 1921, 62,707.

## PERU

*Plague—March, 1926.*—During the month of March, 1926, 93 cases of plague with 37 deaths were reported in Peru, occurring at 17 localities. The localities showing the largest numbers of cases were Chimbote, with 16 cases, 8 deaths, the occurrence being at country estates in the vicinity; Cascas and Trujillo with 15 cases and 5 deaths, each, and Contumazá, with 12 cases. In five localities plague was reported present; in two localities one case each was reported. For distribution of occurrence according to locality, see page 1014.

*Sanitary improvements—Lima.*—Under date of April 6, 1926, improvements in sanitary conditions in Lima and vicinity were ordered by the Bureau of Sanitation to be enforced as follows: Maintenance of moving-picture houses in good sanitary condition; medical relief, which was stated to be practically nonexistent in country districts, to be provided for workers on estates in the vicinity of Lima; and installation of crematory furnaces for destruction of city refuse.

## SALVADOR

*City improvements—San Salvador—1925.*—The outstanding public improvement during the year 1925 at San Salvador, Republic of Salvador, was the completion of the work of sanitation and paving of the city. This constructive work was provided for in the year 1922, and included installation of sanitary and storm sewers, water supply, and paving of the streets with concrete and asphalt. In 1925 the program of improvement was enlarged to include installation of underground conduits for electric and telephone wires, enlargement and purification of the water supply, and the installation of water meters. The work was begun in 1924. In 1925 the surfacing was completed, all sections, practically, of the city being reached by smoothly paved streets. By the end of the year 30 per cent of the sanitary sewers provided for and 50 per cent of the storm-drainage

sewers were completed. The water supply of the city is to be increased to 30,000,000 liters daily. The daily supply has actually been increased by approximately 600,000 to 800,000 liters.

## SIAM

*Cholera—Bangkok—Summary, periods October 4–December 26, 1925, and December 27, 1925–March 13, 1926.*—During the first-named period, 431 cases of cholera with 258 deaths, and during the second period, 386 cases with 249 deaths were reported at Bangkok, Siam. Population of city and suburbs, estimated, 745,640.

## UNION OF SOUTH AFRICA

*Further relative to plague—Orange Free State—March 21–27, 1926.*—Continuance of plague in the Orange Free State, Union of South Africa, was reported during the week ended March 27, 1926, with 12 cases and 4 deaths. Of these, five cases with three deaths were Europeans, three of the cases being pneumonic in type and occurring in the same family. It was stated that isolation huts and special nurses had been sent to the infected area. For distribution of occurrence according to locality, see page 1014.

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

The reports contained in the following tables must not be considered as complete or final as regards either the lists of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended May 21, 1926<sup>1</sup>

## CHOLERA

Place	Date	Cases	Deaths	Remarks
India:				
Calcutta	Mar. 28–Apr. 3	37	30	
Madras	Apr. 4–10	1	1	
Rangoon	Mar. 21–Apr. 3	4	3	
Siam:				
Bangkok	Mar. 21–27	90	52	Oct. 4–Dec. 26, 1925: Cases, 431; deaths, 258. Dec. 27, 1925–Mar. 13, 1926: Cases, 386; deaths, 249.

## PLAGUE

British East Africa:				
Kenya—				
Kisumu	Mar. 14–20	11		
Uganda	Jan. 1–31	109	101	
India:				
Madras Presidency	Mar. 14–20	69	41	
Rangoon	Mar. 21–Apr. 3	20	19	
Java:				
Batavia Province	Mar. 19–26	18	18	
Cheribon	Feb. 7–27		11	
Koenigman	do		102	
Pekalongan	Feb. 14–27		39	
Surabaya	Mar. 7–13	2	2	
Tegal	Feb. 21–27		10	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

## **Reports Received During Week Ended May 21, 1926—Continued**

### **PLAGUE—Continued**

Place	Date	Cases	Deaths	Remarks
<b>Peru</b>				March, 1926: Cases, 93; deaths, 37.
Barranca and Supo	Mar. 1-31	4	6	
Cafete	do	1		
Caras	do			Present.
Casca	do	15	5	
Chiclayo	do		4	
Chimbote	do	16	8	Country estates.
Chincha	do	14	5	
Contumaza	do	12		
Cutorvo	do			Present.
Lacranmarca	do	6		
Mollendo	do	2	1	
Moro	do			Present.
Otuzco	do	1		
Pacamayo	do	2	1	
Salaverry	do	5	2	
San Pablo	do			Present.
Trujillo	do	15	5	
<b>Union of South Africa</b>				Mar. 21-27, 1926: Cases, 12; deaths, 4. (European cases, 5; deaths, 3.) Three cases (1 fatal), pneumonic.
<b>Orange Free State—District—</b>				
Grandfort	Mar. 21-27	3	1	European, in same family Pneumonic.
Hoopstad	do	4	1	European, 1 fatal case.
Winburg	do	5	2	European, 1 case, 1 death.

### **SMALLPOX**

<b>Algeria:</b>				
Algiers	Apr. 1-10	3		
<b>Brazil:</b>				
Para	Mar. 7-20	2		
Rio de Janeiro	Mar. 21-Apr. 3	55	26	
<b>British East Africa:</b>				
Kenya—				
Mombasa	Mar. 14-20	1		
Tanganyika—				
Dar-es-Salaam	Feb. 21-27	1		
<b>Canada:</b>				
Alberta	Apr. 25-May 1	8		
Manitoba	do	18		
Ontario				Apr. 25-May 1, 1926: Cases, 14.
Toronto	Apr. 25-May 1	1		
Saskatchewan				Apr. 25-May 1, 1926: Cases, 1.
Regina	Apr. 25-May 1	2		
<b>China:</b>				
Amoy	Mar. 22-Apr. 3		10	
Antung	Mar. 21-Apr. 4	1		
Chungking	Mar. 28-Apr. 3			Present.
Manchuria—				
Dairen	Mar. 8-14	2		
Harbin	Apr. 2-8	2		
Supingkai	Apr. 1-3	1		
Shanghai	Mar. 28-Apr. 3	1	3	South Manchurian Railway. Cases, foreign.
Swatow	Apr. 4-10			Present.
<b>Chosen:</b>				
Seishin	Mar. 1-31	10	6	
<b>Egypt:</b>				
Alexandria	Mar. 5-18	2	1	
<b>France:</b>				
Paris	Mar. 21-31	1	1	
<b>Great Britain:</b>				
England and Wales	Apr. 11-24	343		
<b>India:</b>				
Bombay	Mar. 21-27	33	13	
Calcutta	Mar. 28-Apr. 3	33	31	
Madras	Apr. 4-10	7	1	
Rangoon	Mar. 21-Apr. 3	20	7	
<b>Indo-China:</b>				
Saigon	Mar. 15-21	1	1	



# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

## **Reports Received During Week Ended May 21, 1926—Continued**

### **SMALLPOX—Continued**

Place	Date	Cases	Deaths	Remarks
Italy: Rome	Feb. 22-28	1		Occurring in the consular district.
Jamaica				Mar. 28-Apr. 24, 1926: Cases, 111, exclusive of Kingston. Reported as alastrim.
Kingston	Mar. 28-Apr. 24	2		Reported as alastrim.
Japan: Kobe	Apr. 11-17	2		
Taiwan Island	Mar. 21-31	3		Formosa.
Yokohama	Mar. 28-Apr. 10	8	5	To Apr. 11, 1926: Cases, 58; deaths, 10.
Java: Bantam Residency— Serang	Feb. 14-27	5		
Surabaya	Mar. 7-13	4	1	
Mexico: Aguascalientes	Apr. 18-24		1	
Guadalajara	Apr. 20-26		4	
Mexico City	Apr. 11-17	1		Including municipalities in Federal district.
San Luis Potosi	Apr. 25-May 1		4	
Portugal: Lisbon	Apr. 4-17	10		
Siam: Bangkok	Mar. 21-27	6	5	
Spain: Valencia	Apr. 18-24	1		
Straits Settlements: Singapore	Feb. 7-27	5		
Tunisia: Tunis	Apr. 11-20	1		

### **TYPHUS FEVER**

Algeria: Algiers	Apr. 1-10	2		
Chile				Jan. 1-15, 1926: Cases, 23.
Achao	Jan. 1-15	1		
Ancud	do.	2		
Salamanca	do.	17		
Valparaiso	do.	3		
China: Antung	Mar. 29-Apr. 11	4		
Manchuria— Harbin	Apr. 2-8	1		
Greece: Saloniki	Mar. 16-22	2		
Poland				Jan. 11-Feb. 6, 1926: Cases, 185; deaths, 18. Occurring in district Krakow.

## **Reports Received from December 26, 1925, to May 14, 1926<sup>1</sup>**

### **CHOLERA**

Place	Date	Cases	Deaths	Remarks
Chosen	October - November, 1925	12	5	
French Settlements in India	Dec. 1-31	880	712	
India: Calcutta	Nov. 1-28	101	89	Oct. 13, 1925, to Jan. 2, 1926: Cases, 21,316; deaths, 12,371.
Do.	Dec. 6-26		54	Jan. 3-Feb. 6, 1926: Cases, 17,858; deaths, 10,050.
Do.	Dec. 27-Jan. 16		41	
Do.	Jan. 24-Mar. 27	427	387	
Madras	Nov. 15-Jan. 2	174	70	
Do.	Jan. 3-Apr. 3	144	80	
Rangoon	Nov. 8-Dec. 3	4	4	
Do.	Jan. 24-Mar. 20	0	0	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from December 26, 1925, to May 14, 1926—Continued**

## **CHOLERA—Continued**

Place	Date	Cases	Deaths	Remarks
Indo-China				September-December, 1925: Cases, 11; deaths, 7.
Province—				
Annam	Sept. 1-30	2	2	
Cambodia	Dec. 1-31	2	1	
Cochin China	Sept. 1-Dec. 31	6	4	
Saigon	Jan. 4-17	2	2	
Tonkin	Sept. 1-Nov. 30	3		Including 100 square kilometers of surrounding country.
Japan	Aug. 30-Oct. 17	409		
Do	Oct. 25-Dec. 26	113		
Philippine Islands:				
Manila	Nov. 9-Jan. 3	15	10	
Do	Jan. 4-Mar. 6	3	27	
Province—				
Bataan	Nov. 30-Dec. 26	29	25	
Do	Jan. 2-16	1	1	
Bantangas	Jan. 24-Feb. 20	13	13	
Bohol	Jan. 23-30	1	1	
Bulacan	Oct. 18-Nov. 7	92	64	
Do	Nov. 23-Dec. 31	200	88	
Do	Jan. 2-30	6	6	
Laguna	Nov. 23-Dec. 26	18	14	
Do	Jan. 24-Feb. 6	5	6	
Leyte	Jan. 3-9	2	2	
Mindoro	Dec. 20-31	35	30	
Nueva Ecija	Nov. 30-Dec. 13	7	5	
Pampanga	Nov. 1-7	1	1	
Do	Nov. 23-Dec. 31	113	85	
Do	Jan. 2-Mar. 3	39	35	
Rizal	Sept. 27-Nov. 21	75	21	
Do	Dec. 21-30	14	11	
Do	Jan. 3-Feb. 20	80	30	
Romblon	Nov. 8-Dec. 13	27	14	
Russia	May-June	7		
Do	July-August	4		
Siam:				
Bangkok	Oct. 4-Nov. 14	108	68	
Do	Nov. 22-Dec. 26	270	149	
Do	Dec. 27-Mar. 13	398	275	
On vessel:				
Steamship	Oct. 3	9		Arrived at Bangkok, Siam: Cases in coolie passengers.

## **PLAGUE**

Argentina				Jan. 24-30, 1926: 6 cases, occurring in interior Provinces of Salta and Santa Fe.
Buenos Aires	Jan. 24-30	1		
Azores:				
St. Michaels	Jan. 17-Apr. 3	9	4	
Belgium:				
Vilvorde	Dec. 1-8	1	1	
Brazil:				
Bahia	Nov. 8-Dec. 23	3	1	
Do	Dec. 27-Jan. 30	4	2	
Santos	Dec. 8-21		2	
Sao Paulo	Reported Mar. 23	4	1	
British East Africa:				
Kenya				
Kisumu	Nov. 22-Dec. 5	1	2	
Do	Jan. 31-Feb. 27	4	3	
Uganda Protectorate	Sept. 1-Dec. 31	468	426	
Canary Islands:				
La Laguna	Dec. 24	3	2	
Las Palmas	do	1		
Do	Jan. 7	1	1	
Santa Cruz de Tenerife	Dec. 18-27	3		
Do	Dec. 28-Feb. 1	3		
Celebes:				
Makassar	Dec. 29-Feb. 2	12	12	Netherlands East Indies.
Ceylon:				
Colombo	Nov. 15-Dec. 5	3	3	1 plague rodent.
Do	Dec. 27-Jan. 16	2	2	
Do	Jan. 24-Mar. 6	5	5	Feb. 14-20, 1926: Two plague rodents.
China:				Prevalent.
Nanking	Nov. 15-Mar. 27			

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from December 26, 1925, to May 14, 1926—Continued**

## **PLAGUE—Continued**

Place	Date	Cases	Deaths	Remarks
<b>Ecuador:</b>				
Ambato.....	Mar. 31.....	1	5	
Eloy Alfaro.....	Jan. 1-15.....	31	12	Rats taken, Nov. 1-Dec. 31, 1925, 49,370; rats found infected, 281.
Guayaquil.....	Nov. 1-Dec. 31.....	62	27	Rats taken, Jan. 1-Mar. 31, 1926, 64,002; rats found infected, 543.
Do.....	Jan. 1-Mar. 31.....			
Recreo (country estate).....	do.....	1		Jan. 1-Dec. 9, 1925: Cases, 138.
<b>Egypt:</b>				
Alexandria.....	Mar. 10-18.....	2	1	
Beni Suef.....	Nov. 18.....	1	1	
Fayoum Province.....	Dec. 3-9.....	1	1	
Gharbia Province.....	Mar. 9-30.....	5	3	
Mina Province.....	Mar. 4.....	1	1	
Suez.....	Mar. 27.....	1	1	
<b>Greece:</b>				
Athens.....	Nov. 1-30.....	18	4	Including Piræus.
Do.....	Jan. 1-Mar. 31.....	25	4	
Herakleion.....	Feb. 4.....	1		On island of Crete.
Patras.....	Nov. 13-Dec. 12.....	4	1	
<b>Hawaii Territory:</b>				
Hawaii—				
Honokaa.....	Mar. 16.....	2		1 plague-infected rodent found near Hamakua Mill Co.
Kakuihaela.....	Mar. 19.....	1	1	1 death suspected plague.
Panulo.....				Jan. 29, 1926: Plague-infected rat found in vicinity.
<b>India:</b>				
Bombay.....	Dec. 6-12.....	1	1	Oct. 18, 1925, to Jan. 2, 1926: Cases, 15,135; deaths, 10,677.
Do.....	Jan. 3-Feb. 20.....		8	Jan. 3-Feb. 6, 1926: Cases, 17,402; deaths, 13,598.
Do.....	Mar. 7-13.....	4	2	
Calcutta.....	Dec. 6-12.....	1	1	
Karachi.....	Nov. 1-Dec. 19.....	4	3	
Do.....	Feb. 21-Apr. 3.....	7	5	
Madras Presidency.....	Oct. 25-Nov. 7.....	75	41	
Do.....	Nov. 15-21.....	35	22	
Do.....	Dec. 20-26.....	108	64	
Do.....	Jan. 3-Feb. 20.....	971	617	
Do.....	Feb. 20-Mar. 13.....	189	115	
Rangoon.....	Oct. 25-Dec. 26.....	23	15	
Do.....	Dec. 27-Mar. 20.....	93	83	
<b>Indo-China:</b>				September-December, 1925: Cases, 28; deaths, 26.
Province—				
Cambodia.....	Sept. 1-Nov. 30.....	13	13	
Cochin China.....	Sept. 1-Dec. 31.....	15	13	
<b>Iraq:</b>				
Bagdad.....	Dec. 13-Jan. 2.....	7	3	
Do.....	Jan. 10-Mar. 13.....	75	44	
<b>Java:</b>				
Batavia.....	Oct. 24-Nov. 6.....	94	89	Province.
Do.....	Nov. 14-Jan. 1.....	315	297	
Do.....	Jan. 2-Mar. 12.....	483	468	
Cheribon.....	Sept. 27-Oct. 17.....		166	
Do.....	Nov. 15-Dec. 26.....		198	
Do.....	Jan. 3-Feb. 6.....		8	
Djokjakarta.....	Oct. 20-Nov. 9.....			Epidemic in 1 locality.
Kediri.....	Dec. 7.....			Do.
Koeninigan.....	Dec. 27-Jan. 16.....		114	
Pekalongan.....	Sept. 27-Oct. 17.....		42	
Do.....	Nov. 8-Dec. 26.....		252	
Probolinggo.....	Feb. 12.....			Epidemic. Port.
Rembang.....	Oct. 20.....			Do.
Surabaya.....	Oct. 11-Dec. 26.....	59	59	
Do.....	Dec. 27-Feb. 27.....	40	40	
Tegal.....	Sept. 27-Oct. 17.....	6	6	
Do.....	Nov. 8-Dec. 26.....		31	
<b>Madagascar:</b>				Nov. 1-December, 1925: Cases, 632; deaths, 593. Jan. 1-31, 1926: Cases, 611; deaths, 595.
Province—				
Ambositra.....	Dec. 16-31.....	9	7	
Do.....	Jan. 1-15.....	2	2	
Fort Dauphin.....	Sept. 16-30.....	6	3	
Do.....	Jan. 16-Feb. 15.....	2	2	
Itasy.....	Sept. 16-Oct. 30.....	20	20	
Do.....	Nov. 16-Dec. 31.....	34	34	
Do.....	Jan. 1-15.....	29	29	
Do.....	Feb. 1-15.....	29	29	
Moramanga.....	Sept. 16-Dec. 31.....	49	48	
Do.....	Jan. 1-Feb. 28.....	45	44	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from December 26, 1925, to May 14, 1926—Continued**

## **PLAGUE—Continued**

Place	Date	Cases	Deaths	Remarks
Madagascar—Continued.				
Province—Continued.				
Tananarive				Sept. 16-Nov. 30, 1925: Cases, 368; deaths, 341. Dec. 16-31, 1925: Cases, 152; deaths, 143. Jan. 1-Feb. 28, 1926: Cases, 480; deaths, 407.
Town—				
Tamatave (Port)	Sept. 16-Nov. 30	42	11	
Do.	Feb. 1-15	4	2	
Tananarive	Sept. 16-30	2	2	
Do.	Nov. 1-30	11	11	
Do.	Jan. 1-Feb. 28	19	19	
Mauritius Island	Sept. 20-Dec. 26	21	18	
Moca	Dec. 1-31	2	2	
Pamplemousses	Oct. 1-Nov. 30	3	2	
Port Louis	Oct. 1-Dec. 31	13	9	
Rivière du Rempart	October	2		
Nigeria	Aug. 1-Nov. 30	559	419	
Persia:				
Teheran	Oct. 21-Nov. 21		12	
Peru				January, February, 1926: Cases, 290; deaths, 111. Port 60 miles north of Callao. In hospital. Some cases in Province.
Huacho	Jan. 26	15		
Lima	Jan. 1-31	20		
Mollendo	do			12 or 15 cases reported unofficially.
Russia	May-June	67		
Do.	July-October	166		
Senegal	September-October	45	25	
Siam	Aug. 23-Dec. 26	65	53	
Bangkok	Nov. 15-28	3	3	
Do.	Jan. 3-30	38	33	
Do.	Feb. 7-20	11	5	
Do.	Feb. 28-Mar. 20	3	2	
Straits Settlements:				
Singapore	Nov. 1-Dec. 5	8	8	
Do.	Jan. 3-9	2	2	
Syria:				
Beirut	Nov. 11-20	1		
Do.	Jan. 21-31	1		
Union of South Africa				Mar. 7-13, 1926: Cases, 3; European, 2.
Cape Province—				
Kimberley district	Dec. 13-19	1		
Middleburg district	Dec. 6-12	1		European.
Steynsburg district	Nov. 15-21	1		Native. On farm.
Winburg district	Feb. 21-27	1		
Orange Free State				Mar. 14-20, 1926: Cases, 4; deaths, 5, of 2 deaths were of Europeans and one native, previously reported as cases Mar. 7-13, 1926.
Boshof district	Nov. 29-Dec. 5	1	1	In native.
Bothaville district	Dec. 6-12	1	1	Native. On farm.
Hoopstad	Mar. 7-13	1		European.
Kroonstad district	Mar. 14-20	1		Do.
Winburg	do	5	2	
On vessel:				
Steamship Cid				Jan. 29, 1926. Plague rat. At Buenaventura, Colombia. Rat was killed while jumping ashore from vessel.

## **SMALLPOX**

Algeria:				
Algiers	Nov. 21-Dec. 31	177		
Do.	Jan. 1-10	64		
Do.	Jan. 21-Mar. 20	72		
Arabia:				
Aden	Nov. 29-Dec. 5	1		Imported.
Do.	Jan. 10-Mar. 6	10	1	
Argentina:				
Rosario	October		1	
Australia:				
Queensland—				
Brisbane	Dec. 9-15	1		



# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from December 26, 1925, to May 14, 1926—Continued**

## **SMALLPOX—Continued**

Place	Date	Cases	Deaths	Remarks
Azores:				
Fayal Island	Feb. 2-Apr. 11			Present. Reported as alastrim.
Bahamas	Feb. 23			In Nassau district. Stated to have been imported.
Brazil:				
Manaos	Dec. 1-31		12	
Do.	Jan. 31-Feb. 20		6	
Para	Jan. 10-Mar. 6	28	6	
Rio de Janeiro	Nov. 1-28	134	72	
Do.	Dec. 6-26	65	26	
Do.	Dec. 27-Mar. 20	224	198	June 27, 1925-Mar. 20, 1926. Cases, 1,089; deaths, 380.
British East Africa:				
Kenya—				
Mombasa	Nov. 15-Dec. 19	14	6	
Do.	Dec. 27-Jan. 2	1		From mainland.
Uganda Protectorate	Sept. 1-Oct. 31	8	4	
British South Africa:				
Northern Rhodesia	Jan. 5-11	2		
Southern Rhodesia	Nov. 13-Dec. 23	3		
Canada				Sept. 13-Jan. 2: In 7 Provinces, 186 cases. Jan. 3-Feb. 27, 1926: Cases, 277.
Alberta				Jan. 3-Apr. 17, 1926: Cases, 61.
Calgary	Dec. 13-19	1		From Drumheller, vicinity of Calgary.
British Columbia—				
Vancouver	Jan. 4-Mar. 27	2		
Victoria	Mar. 21-27	2		
Manitoba				Jan. 3-Apr. 17, 1926: Cases, 52.
Winnipeg	Dec. 13-19	2		
Do.	Jan. 3-Apr. 10	16	1	
New Brunswick—				
Northumberland	Dec. 6-13	1		
Ontario				Dec. 1-31, 1925: Cases, 32. Jan. 3-Apr. 17, 1926: Cases, 224.
Admaston	Jan. 1-Feb. 1	16		Township.
Alice and Fraser	Feb. 1-28	6		Do.
King	do.	7		Do.
Willmot	do.	6		Do.
Belleville	do.	4		
Kingston	Mar. 8-14	1		
Kitchener	do.	26		
North Bay	Feb. 14-Mar. 14	7		
Ottawa	Dec. 6-12	2		
Do.	Jan. 3-Feb. 6	2		
Sarnia	Mar. 14-Apr. 17	4		
Toronto	Dec. 27-Jan. 2	1		
Do.	Jan. 3-Apr. 17	27		
Trenton	do.	15		
Saskatchewan				Jan. 3-Apr. 17, 1926: Cases, 107.
Moose Jaw	Jan. 3-Mar. 20	2		
Regina	Jan. 24-Mar. 13	3		
Saskatoon	Feb. 14-20	1		
Ceylon:				
Colombo	Dec. 6-12	1		Port case.
Do.	Jan. 3-Feb. 6	5		
Chile:				
Punta Arenas	Dec. 13-26		8	
Do.	Dec. 27-Jan. 2		4	
China:				
Amoy	Oct. 25-Dec. 19		1	
Do.	Jan. 10-Mar. 20		16	
Antung	Dec. 7-20	2		
Changsha	Feb. 21-27			Present.
Chungking	Nov. 15-27			Do.
Do.	Feb. 28-Mar. 27			Do.
Foochow	Nov. 1-Mar. 20			Do.
Hankow	Nov. 14-Dec. 26	4		
Do.	Jan. 10-Mar. 6	3		
Hongkong	Nov. 22-Dec. 26	4		
Do.	Jan. 3-Mar. 20	13	5	
Manchuria—				
An-shan	Dec. 6-12	1		
Do.	Jan. 10-Mar. 20	9		
Changchun	do.	21		

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from December 26, 1925, to May 14, 1926—Continued**

## **SMALLPOX—Continued**

Place	Date	Cases	Deaths	Remarks
<b>China—Continued.</b>				
<b>Manchuria—Continued.</b>				
Dairen	Oct. 19-Dec. 27	73	15	
Do.	Dec. 28-Mar. 7	77	24	
Fushun	Jan. 17-Mar. 31	3		
Harbin	Jan. 1-Mar. 18	10		
Kai-yuan	Jan. 10-30	4		
Kungchuling	Jan. 31-Feb. 20	2		
Lio-yang	Jan. 17-Mar. 30	5		
Mukden	Oct. 24-Nov. 15	1		
Do.	Jan. 24-Feb. 27	4		
Suping Kai	Mar. 14-20	1		
Tieh-ling	Oct. 26-Nov. 15	2		
Nanking	Nov. 21-Dec. 26			Present.
Do.	Dec. 27-Apr. 10			Do.
Shanghai	Oct. 25-Jan. 2	37	36	
Do.	Jan. 3-Mar. 13	36	131	Cases, foreign only.
Swatow	Nov. 22-Apr. 3			Prevalent.
Tientsin	Nov. 1-Dec. 19	2		
Do.	Jan. 23-Feb. 27	2		
Chosen:				
Seishin	Jan. 1-Feb. 28	48	27	
<b>Egypt:</b>				
Alexandria	Dec. 3-31	5	2	
Do.	Jan. 8-14	2	1	
Do.	Jan. 29-Mar. 4	22	6	
Cairo	Dec. 25-31	14		
Do.	Jan. 1-7	3		
Port Said	Feb. 26-Mar. 4	1		
Esthonia				November, 1925: Cases, 3.
France				September-December, 1925: Cases, 253.
Havre	Jan. 25-31		9	
Paris	Mar. 1-20	9	1	
Gold Coast	September, December.	58	5	
<b>Great Britain:</b>				
<b>England and Wales</b>				
Hull	Dec. 27-Jan. 23	29		Nov. 15-Dec. 26, 1925: Cases, 700.
Do.	Feb. 7-Mar. 27	9		Dec. 27-Apr. 10, 1926: Cases, 3,801.
Leeds	Jan. 14-Feb. 6	4		
London	Jan. 31-Feb. 6		1	
Newcastle-on-Tyne	Nov. 29-Dec. 19	6		
Do.	Dec. 27-Apr. 10	40	1	
Nottingham	Nov. 22-Dec. 20	9		
Do.	Dec. 27-Mar. 13	6		
Sheffield	Nov. 22-Dec. 12	7		
Do.	Dec. 20-26	3		
Do.	Dec. 27-Mar. 20	18		
South Shields	Feb. 9			Reported present in severe form.
Greece				Oct. 1-31, 1925: Cases, 16.
Athens	Nov. 1-Dec. 31	18	1	
Do.	Jan. 1-Mar. 31	87	6	
Kalamata	Mar. 1-7	1		From Patras.
Saloniki	Feb. 16-Mar. 15		2	
<b>Guadeloupe (West Indies)</b>				
India				Apr. 23, 1926: Present. Alastrim.
Bombay	Nov. 8-Dec. 26	26	20	Oct. 18-Dec. 26, 1925: Cases, 19,472; deaths, 4,440. Dec. 27, 1925-Feb. 6, 1926: Cases, 36,335; deaths, 11,491.
Do.	Dec. 27-Mar. 20	227	122	
Calcutta	Nov. 8-Dec. 26	48	25	
Do.	Dec. 27-Mar. 27	587	366	
Karachi	Nov. 1-21	23		
Do.	Nov. 29-Dec. 5	4	3	
Do.	Dec. 13-19	3		
Do.	Dec. 29-Apr. 3	102	32	
Madras	Nov. 15-Dec. 20	17	5	
Do.	Dec. 27-Apr. 3	128	23	
Rangoon	Oct. 25-Nov. 28	3		
Do.	Dec. 6-26	4	1	
Do.	Dec. 27-Jan. 16	13	1	
Do.	Jan. 24-Mar. 6	70	17	
<b>Indo-China.</b>				
<b>Province—</b>				
Annam	Sept. 1-Dec. 31	232	44	September-November, 1925: Cases, 346; deaths, 86.
Cambodia	do.	84	34	
Cochin China	do.	106	51	
Saigon	Dec. 21-27	2	1	
Do.	Jan. 1-Mar. 7	11	1	
Tonkin	Sept. 1-Dec. 31	153	2	Including 100 kilometers of surrounding country.

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from December 26, 1925, to May 14, 1926—Continued

## SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Iraq:				
Bagdad.....	Nov. 1-Dec. 26.....	19	15	Sept. 6-Oct. 17, 1925: Cases, 81; deaths, 40.
Do.....	Dec. 27-Mar. 13.....	20	11	
Basra.....	do.....	52	42	
Italy.....				Aug. 2, 1925-Jan. 2, 1926: Cases, 52. Jan. 3-16, 1926: Cases, 12.
Catania.....	Feb. 15-28.....	1	1	
Genoa.....	Jan. 21-Feb. 10.....	4		
Rome.....	Oct. 12-25.....	1		
Jamaica.....				Nov. 20-Dec. 26, 1925: Cases, 95. Dec. 27, 1925-Apr. 3, 1926: Cases, 425. Reported as alastrim.
Kingston.....	Nov. 29-Dec. 26.....	43		Reported as alastrim.
Do.....	Dec. 27-Jan. 30.....	48		Do.
Do.....	Feb. 28-Mar. 27.....	34		Do.
Japan:				
Kobe.....	Mar. 14-20.....	1		
Nagasaki.....	Feb. 15-21.....	1		
Taiwan.....	Nov. 11-Dec. 10.....	3		
Yokohama.....	Dec. 14-20.....	1		
Do.....	Feb. 23-Mar. 27.....	59	6	
Java:				
Batavia.....	Oct. 24-Dec. 25.....	8		
Do.....	Feb. 20-Mar. 5.....	5		
Buitenzorg.....	Nov. 29-Dec. 5.....	1		
Cheribon.....	Nov. 8-Dec. 12.....	2		
Do.....	Jan. 31-Feb. 6.....		1	
Kraksaan.....	Oct. 11-17.....	11		
Malang.....	Oct. 11-Dec. 26.....	2		
Do.....	Dec. 27-Jan. 16.....	3	2	
North Bantam.....	Oct. 4-17.....	4		
Pekalongan.....	Oct. 25-31.....	1		
Pontianak.....	Jan. 31-Feb. 6.....		1	
Probolinggo.....	Oct. 11-17.....	1		
South Bantam.....	do.....	1		
Surabaya.....	Oct. 11-Dec. 26.....	633	104	
Do.....	Dec. 27-Feb. 13.....	131	40	
Tegal.....	Oct. 4-10.....	9	1	
Latvia.....				December, 1925: Cases, 3.
Malta.....	Nov. 1-Dec. 21.....	21	3	
Do.....	Jan. 1-Feb. 28.....	20		
Mexico:				July-September, 1925: Deaths, 1,157.
Aguascalientes.....	Dec. 13-Jan. 2.....	4	3	
Do.....	Jan. 3-30.....		7	
Do.....	Feb. 14-Apr. 17.....	48	1	
Durango.....	Dec. 1-31.....		1	
Do.....	Jan. 1-31.....		2	
Guadalajara.....	Dec. 27-Apr. 19.....		17	
Mexico City.....	Nov. 28-Dec. 5.....	1		Including municipalities in Fed- eral District.
Do.....	Jan. 3-Apr. 10.....	9		Do.
Saltillo.....	Apr. 4-10.....	1		
San Luis Potosi.....	Jan. 17-Mar. 20.....		53	
Do.....	Mar. 28-Apr. 24.....	15	18	
Tampico.....	Dec. 21-Jan. 2.....	1	1	
Do.....	Jan. 2-Mar. 10.....	8		
Torreón.....	Nov. 1-Dec. 31.....		51	
Do.....	Jan. 1-Mar. 31.....		65	
Vera Cruz.....	Mar. 29-Apr. 4.....	5	1	
Netherlands:				
The Hague.....	Jan. 30-Mar. 6.....	2	1	
Nigeria.....				August-November, 1925: Cases, 347; deaths, 6.
Palestine:				
Hebron.....	Jan. 26-Feb. 1.....	2		
Tiberias.....	Feb. 9-15.....	1		
Persia:				
Teheran.....	July 23-Dec. 22.....		775	
Do.....	Dec. 23-Feb. 19.....		99	
Peru:				
Arequipa.....	Oct. 1-Dec. 31.....		2	
Poland.....				Nov. 1-28, 1925: Cases, 9. Jan. 1-16, 1926: Cases, 4.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from December 26, 1925, to May 14, 1926—Continued**

## **SMALLPOX—Continued**

Place	Date	Cases	Deaths	Remarks
Portugal				Mar. 1-28, 1926: Deaths, 6.
Lisbon	Oct. 4-31	124		
Do	Nov. 16-Dec. 27		60	
Do	Nov. 14-Dec. 26	187		
Do	Dec. 27-Mar. 27	116	29	
Oporto	Nov. 23-Dec. 10	2	3	
Do	Dec. 27-Mar. 6	3	1	
Rumania	August-October	3		
Russia				May-June, 1925: Cases, 2,333.
Do	July-October	1,563		
Siam				July 12-Sept. 5, 1925: Cases, 21; deaths, 6.
Bangkok	Dec. 20-25	3	1	
Do	Dec. 26-Mar. 6	81	37	
Do	Mar. 14-20	8	7	
Sierra Leone:				
Konno district	Dec. 16-31	5		
Spain:				
Madrid	Year 1925		18	
Do	Jan. 1-31		1	
Malaga	Nov. 29-Dec. 5		2	
Do	Dec. 27-Jan. 2		1	
Valencia	Dec. 20-26			
Do	Dec. 27-Jan. 2	1		
Do	Jan. 10-Feb. 6	9		
Do	Feb. 14-Apr. 17	11		
Straits Settlements:				
Penang	Mar. 28-Apr. 3		1	
Singapore	Dec. 20-26	1		
Do	Jan. 10-16	2	1	
Sumatra:				
Medan	Feb. 14-27	2		
Switzerland				June 28-Nov. 21, 1925: Cases, 62;
Lucerne	Oct. 1-Nov. 30	8		Dec. 27, 1925-Jan. 30, 1926:
Do	Jan. 1-31	5		Cases, 37.
Zurich	Dec. 27-Jan. 2	1		
Trinidad (West Indies):				
Port of Spain	Jan. 1-Apr. 3	12		
Tunisia:				
Tunis	Nov. 21-30	2		
Do	Dec. 11-31	10	1	
Do	Jan. 1-Feb. 20	6		
Union of South Africa:				
Cape Province	Jan. 17-23			Outbreaks.
Orange Free State—				
Kuruman district	Jan. 10-16			Do.
Ladybrand district	Dec. 27-Jan. 2			Do.
Transvaal—				
Belfast district	do			Do.
Germiston district	Jan. 2-9			Do.
Pretoria district	Dec. 6-12			Outbreaks. In native com-
On vessel	Feb. 21	2		pound. Mexican steamer Monteruma, at Port of Ensenada, Mexico.

## **TYPHUS FEVER**

Algeria:				
Algiers	Nov. 1-Dec. 20	2		
Do	Jan. 1-Mar. 31	11		
Argentina:				
Rosario	Oct. 12-Dec. 31	2		
Bulgaria	Sept. 1-Dec. 31	50	3	
Sofia	Dec. 23-31	1		
Do	Jan. 8-14	2		
Canary Islands:				
Santa Cruz de Tenerife	Mar. 8-14	1		
Chile				Dec. 15-31, 1925: Cases, 43.
Achao	Dec. 15-31	1		
Antofagasta	Apr. 11-17	1		
Bulnes	Dec. 15-31	1		
Chillan	do	24		
Concepcion	do	6		
Linares	do	1		



# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from December 26, 1925, to May 14, 1926—Continued**

## **TYPHUS FEVER—Continued**

Place	Date	Cases	Deaths	Remarks
Chile—Continued.				
Los Angeles	Dec. 15-31	5		
Penco	do	2		
San Carlos	do	1		
Talca	do	1		
Valparaiso	Nov. 29-Jan. 2	5	2	
Do.	Mar. 21-27	1		
China:				
Antung	Nov. 29-Dec. 27	5	1	
Do.	Jan. 4-Mar. 14	11		
Hongkong	Dec. 27-Jan. 2	1		
Manchuria—				
Harbin	Dec. 17-Feb. 4	3		
Shanghai	Mar. 14-20	1		
Czechoslovakia	October-December	146	1	
Egypt:				
Alexandria	Jan. 8-Feb. 25	2		
Cairo	Nov. 5-Dec. 16	3	2	
Port Said	Nov. 19-25	1		
Do.	Mar. 12-18	1		
Estonia	Jan. 1-31	6		
Finland				October, 1925: 1 case.
France	July-October	4		
Greece				December, 1925: Cases, 12.
Athens	Nov. 1-30	11	2	
Do.	Jan. 1-Mar. 31	45	9	
Saloniki	Dec. 29-Jan. 4	1		
Do.	Feb. 2-8	1		
Hungary				November-December, 1925: Cases, 16.
Ireland:				
Cork County—				
Cork	Dec. 26-Jan. 1	2		
Do.	Jan. 2-8	5		
Dumanway	Nov. 14	1		
Galway County	Oct. 17	1		
Kerry County—				
Listowel	Mar. 7-13	1		Rural district.
Wexford County—				
Gorey	do	1		Do.
Latvia	October-December	12		
Riga	Oct. 1-31	2		
Lithuania				September-October, 1925: Cases, 9; deaths, 1.
Mexico				July-September, 1925: Deaths, 90.
Agascalientes	Dec. 14-19	1		
Durango	Dec. 1-31		1	
Do.	Jan. 1-31		1	
Guadalajara	Dec. 8-28		2	
Do.	Dec. 29-Jan. 4		1	
Mexico City	Nov. 22-Dec. 26	50		Including municipalities in Federal District.
Do.	Dec. 27-Mar. 20	89		Do.
Do.	Mar. 28-Apr. 10	11		Do.
San Luis Potosi	Feb. 6-13		1	
Tampico	Dec. 21-Jan. 10	1	1	
Torreon	November, 1925		1	
Vera Cruz	Feb. 12		1	
Morocco	August-December	93		
Norway				November-December, 1925: Cases, 2.
Palestine:				
Ekron	Mar. 30-Apr. 5	1		
Gaza	Dec. 18	1		
Haifa	Mar. 16-22	1		
Jaffa	Dec. 1-7	1		
Do.	Feb. 23-Mar. 1	1		
Nazareth	Nov. 3-9	1		
Ramleh	Mar. 16-22	1		
Safad	Nov. 24-30	1		
Tel-Aviv	do	1		
Do.	Mar. 9-15	1		
Tiberias	do	2		
Peru:				
Arequipa	October-December		3	
Do.	Feb. 1-Mar. 31		2	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from December 26, 1925, to May 14, 1926—Continued**

## **TYPHUS FEVER—Continued**

Place	Date	Cases	Deaths	Remarks
Poland.....	Oct. 11-Jan. 2.....	462	44	
Do.....	Jan. 3-16.....	190	14	
Rumania.....				July-October, 1925: Cases, 181;
Constantza.....	Feb. 1-Mar. 10.....	2		deaths, 22.
Russia.....				May-June, 1925: Cases, 10,680.
Do.....				July-October, 1925: Cases, 6,035.
Tunisia:				
Tunis.....	Mar. 21-31.....	3		
Turkey:				
Constantinople.....	Jan. 24-30.....	3		
Do.....	Feb. 9-22.....	5	3	From unofficial sources (press).
Union of South Africa.....				October, 1925: Cases, 88; deaths,
				7 (colored). Cases, European,
				7. December, 1925: Cases, 78;
				deaths, 9. Colored: Cases, 73;
				deaths, 9. January-February,
				1926: Cases, 163; deaths, 28.
				Colored.
Cape Province.....	Oct. 1-31.....	63	5	
Do.....	Nov. 8-Dec. 31.....	47	8	
Do.....	Jan. 1-Feb. 28.....	126	20	Do.
Grahamstown.....	Jan. 24-30.....	2		
Middleburg district.....	Dec. 6-12.....	1		European. On farm.
Natal.....	Oct. 1-Dec. 5.....	1		
Do.....	Jan. 1-Feb. 28.....	11	1	Colored.
Durban.....	Jan. 3-Mar. 6.....	4		
Orange Free State.....	Nov. 29-Dec. 5.....	23	1	
Do.....	Dec. 1-31.....	8	1	
Do.....	Jan. 1-Feb. 28.....	8	3	Do.
Bethulia district.....	Dec. 6-12.....			Outbreaks.
Bothaville district.....	do.....	1		Native. On farm.
Transvaal.....	Oct. 1-31.....	1	1	
Do.....	Dec. 1-31.....	18		
Do.....	Feb. 1-28.....	8	4	
Johannesburg district.....	Mar. 1-20.....	3		
Bloembhof district.....	Dec. 27-Jan. 2.....			Outbreak. On farm.
Yugoslavia.....				Jan. 1-Feb. 21, 1926: Cases, 81;
				deaths, 12.

## **YELLOW FEVER**

Gold Coast.....	Sept. 1-Dec. 31.....	4	3
Nigeria.....	August-October.....	3	2
Senegal.....	November, 1925.....	3	2